Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):

700 block of W. Deerpath Rd, 300 block of N. Deepath Sq, 380-380 Chiltern Dr, 670-673 W. Edgecote Ln, 257-315 N.Mellody Rd

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24714 (Decimal Degrees) Longitude: -87.86403 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 1,711

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24714 Longitude: - 87.86403

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-2-B01 THROUGH 2686V2-2-B06 WERE SAMPLED ADJACENT TO SITE 2686V2-2. SEE TABLE 3a AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-162753-1 AND 500-162987-1

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.
Street Address:	420 Eisenhower Lane North
City:	Lombard State: IL Zip Code: 60148
Phone:	630-953-3332

Savo Radulovic
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

P.E or L.P.G. Seal:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-2

Residences and Vacant Lots

Sample ID	2686V2-2-B01-1	2686V2-2-B01-2	2686V2-2-B02-1	2686V2-2-B02-2	2686V2-2-B03-1	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7	7-14	0-7	43660	0-7					
Sample Date	5/2/2019	5/2/2019	5/2/2019	5/2/2019	5/7/2019					
PID	0	0	0	0	0					
Sample pH	8.2	8.2	8.9	8.5	8.1	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.										

Sample ID	2686V2-2-B03-2	2686V2-2-B04-1	2686V2-2-B04-2	2686V2-2-B05-1	2686V2-2-B05-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	7-14	0-7	7-14	0-7	7-14					
Sample Date	5/7/2019	5/7/2019	5/7/2019	5/7/2019	5/7/2019					
PID	0	0	0	0	0					
Sample pH	8.3	8	8.3	8.8	8.3	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.										

Sample ID	2686V2-2-B05-2 DUP	2686V2-2-B06-1	2686V2-2-B06-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	7-14	0-7	7-14					
Sample Date	5/7/2019	5/7/2019	5/7/2019					
PID	0	0	0					
Sample pH	8.2	8.3	8	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil					
No Contaminants of Concern Noted.								

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162753-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/20/2019 4:13:12 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B01-1
Date Collected: 05/02/19 14:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-1
Matrix: Solid
Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Methylene Chloride	**0.0020**	**J**	0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/03/19 17:33*	*05/06/19 16:38*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/03/19 17:33*	*05/06/19 16:38*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/03/19 17:33*	*05/06/19 16:38*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/03/19 17:33*	*05/06/19 16:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1

Client Sample ID: 2686V2-2-B01-1

Date Collected: 05/02/19 14:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-1

Matrix: Solid
Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Benzo[a]pyrene	**0.026**	**J**	0.036	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Benzo[b]fluoranthene	**0.0093**	**J**	0.036	0.0078	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Benzo[g,h,i]perylene	**0.012**	**J**	0.036	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Fluoranthene	**0.0095**	**J**	0.036	0.0067	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Hexachlorocyclopentadiene	<0.73	F1	0.73	0.21	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1

Client Sample ID: 2686V2-2-B01-1
Date Collected: 05/02/19 14:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-1
Matrix: Solid
Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.026**	**J**	0.036	0.0094	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1
Pyrene	**0.0085**	**J**	0.036	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*31 - 143*	*05/09/19 18:59*	*05/10/19 14:02*	*1*
2-Fluorobiphenyl	*87*		*43 - 145*	*05/09/19 18:59*	*05/10/19 14:02*	*1*
2-Fluorophenol	*115*		*31 - 166*	*05/09/19 18:59*	*05/10/19 14:02*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*05/09/19 18:59*	*05/10/19 14:02*	*1*
Phenol-d5	*103*		*30 - 153*	*05/09/19 18:59*	*05/10/19 14:02*	*1*
Terphenyl-d14	*92*		*42 - 157*	*05/09/19 18:59*	*05/10/19 14:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	**J F1**	1.1	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Arsenic	**7.8**		0.53	0.18	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Barium	**43**	**F1**	0.53	0.060	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Beryllium	**0.63**		0.21	0.049	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Boron	**13**		2.6	0.24	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Cadmium	**0.32**	**B**	0.11	0.019	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Calcium	**73000**	**B**	53	8.9	mg/Kg	☼	05/09/19 15:52	05/13/19 14:30	5
Chromium	**16**	**F1**	0.53	0.26	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Cobalt	**17**	**F1**	0.26	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Copper	**22**	**B**	0.53	0.15	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Iron	**18000**		11	5.5	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Lead	**11**		0.26	0.12	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Magnesium	**29000**		5.3	2.6	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Manganese	**460**		0.53	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Nickel	**35**	**F1**	0.53	0.15	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Potassium	**3100**		26	9.3	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Selenium	**1.1**	**F1 B**	0.53	0.31	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Silver	**2.6**		0.26	0.068	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Sodium	**310**		53	7.8	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Thallium	**0.74**	**F1**	0.53	0.26	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Vanadium	**20**		0.26	0.062	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1
Zinc	**62**	**F1**	1.1	0.46	mg/Kg	☼	05/09/19 15:52	05/10/19 15:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 11:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 11:40	1
Manganese	**0.66**		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 11:40	1

Client Sample ID: 2686V2-2-B01-1 **Lab Sample ID: 500-162753-1**
Date Collected: 05/02/19 14:05 **Matrix: Solid**
Date Received: 05/03/19 12:20 **Percent Solids: 87.5**

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.015**	**J**	0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:17	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:17	1
Boron	**0.11**		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:17	1
Calcium	**29**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:17	1
Chromium	**0.062**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:17	1
Cobalt	**0.015**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:17	1
Iron	**52**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:17	1
Lead	**0.027**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:17	1
Manganese	**0.21**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:17	1
Nickel	**0.057**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:17	1
Potassium	**19**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:17	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:17	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:17	1
Zinc	**0.39**	**J B**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:17	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 20:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 20:42	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.018	0.0058	mg/Kg	☼	05/10/19 15:10	05/13/19 09:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:22	1
pH	**8.2**		0.2	0.2	SU			05/09/19 13:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B01-2
Date Collected: 05/02/19 14:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-2
Matrix: Solid
Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Acetone	**0.011**	**J**	0.015	0.0066	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/03/19 17:33*	*05/06/19 17:04*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/03/19 17:33*	*05/06/19 17:04*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/03/19 17:33*	*05/06/19 17:04*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/06/19 17:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1

Client Sample ID: 2686V2-2-B01-2
Date Collected: 05/02/19 14:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-2
Matrix: Solid
Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1

Client Sample ID: 2686V2-2-B01-2

Date Collected: 05/02/19 14:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-2

Matrix: Solid
Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Phenanthrene	**0.015**	**J**	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*31 - 143*	*05/09/19 18:59*	*05/10/19 14:29*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*05/09/19 18:59*	*05/10/19 14:29*	*1*
2-Fluorophenol	*105*		*31 - 166*	*05/09/19 18:59*	*05/10/19 14:29*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*05/09/19 18:59*	*05/10/19 14:29*	*1*
Phenol-d5	*92*		*30 - 153*	*05/09/19 18:59*	*05/10/19 14:29*	*1*
Terphenyl-d14	*84*		*42 - 157*	*05/09/19 18:59*	*05/10/19 14:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J**	1.1	0.21	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Arsenic	**4.3**		0.55	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Barium	**49**		0.55	0.062	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Beryllium	**0.69**		0.22	0.051	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Boron	**17**		2.7	0.25	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Cadmium	**0.22**	**B**	0.11	0.020	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Calcium	**72000**	**B**	55	9.3	mg/Kg	☼	05/09/19 15:52	05/13/19 14:50	5
Chromium	**19**		0.55	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Cobalt	**14**		0.27	0.071	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Copper	**20**	**B**	0.55	0.15	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Iron	**17000**		11	5.7	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Magnesium	**28000**		5.5	2.7	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Manganese	**380**		0.55	0.079	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Nickel	**33**		0.55	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Potassium	**3900**		27	9.7	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Selenium	**1.1**	**B**	0.55	0.32	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Silver	**2.6**		0.27	0.070	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Sodium	**210**		55	8.1	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Thallium	**0.83**		0.55	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Vanadium	**22**		0.27	0.064	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1
Zinc	**50**		1.1	0.48	mg/Kg	☼	05/09/19 15:52	05/10/19 15:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:21	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:21	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B01-2
Date Collected: 05/02/19 14:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-2
Matrix: Solid
Percent Solids: 84.9

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:21	1
Calcium	**17**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:21	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:21	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:21	1
Iron	**0.22**	**J**	0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:21	1
Manganese	**0.011**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:21	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:21	1
Potassium	**1.5**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:21	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:21	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:21	1
Zinc	<0.50		0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:21	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 20:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 20:54	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.017	0.0057	mg/Kg	☼	05/10/19 15:10	05/13/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	05/15/19 10:05	05/15/19 15:23	1
pH	**8.2**		0.2	0.2	SU			05/09/19 13:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B02-1
Date Collected: 05/02/19 13:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-3
Matrix: Solid
Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Methylene Chloride	**0.0036**	**J**	0.0042	0.0017	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/03/19 17:33	05/06/19 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/03/19 17:33*	*05/06/19 17:30*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/03/19 17:33*	*05/06/19 17:30*	*1*
Dibromofluoromethane	*90*		*75 - 126*	*05/03/19 17:33*	*05/06/19 17:30*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/03/19 17:33*	*05/06/19 17:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1

Client Sample ID: 2686V2-2-B02-1
Date Collected: 05/02/19 13:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-3
Matrix: Solid
Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Benzo[a]pyrene	**0.027**	**J**	0.040	0.0079	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B02-1
Date Collected: 05/02/19 13:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-3
Matrix: Solid
Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	05/09/19 18:59	05/10/19 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*80*		*31 - 143*	*05/09/19 18:59*	*05/10/19 14:55*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*05/09/19 18:59*	*05/10/19 14:55*	*1*
2-Fluorophenol	*105*		*31 - 166*	*05/09/19 18:59*	*05/10/19 14:55*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*05/09/19 18:59*	*05/10/19 14:55*	*1*
Phenol-d5	*95*		*30 - 153*	*05/09/19 18:59*	*05/10/19 14:55*	*1*
Terphenyl-d14	*87*		*42 - 157*	*05/09/19 18:59*	*05/10/19 14:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Arsenic	**7.5**		0.58	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Barium	**51**		0.58	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Beryllium	**0.72**		0.23	0.055	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Boron	**13**		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Cadmium	**0.29**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Calcium	**61000**	**B**	58	9.9	mg/Kg	☼	05/09/19 15:52	05/13/19 14:54	5
Chromium	**19**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Cobalt	**14**		0.29	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Copper	**21**	**B**	0.58	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Iron	**19000**		12	6.1	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Lead	**13**		0.29	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Magnesium	**24000**		5.8	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Manganese	**480**		0.58	0.085	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Nickel	**35**		0.58	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Potassium	**3100**		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Selenium	**1.3**	**B**	0.58	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Silver	**3.2**		0.29	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Sodium	**480**		58	8.6	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Thallium	**1.0**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Vanadium	**26**		0.29	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1
Zinc	**66**		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 15:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:55	05/13/19 11:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:55	05/13/19 11:44	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 11:44	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 11:44	1

Client Sample ID: 2686V2-2-B02-1
Date Collected: 05/02/19 13:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-3
Matrix: Solid
Percent Solids: 81.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 11:44	1
Manganese	**0.57**		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 11:44	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 11:44	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.058**		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:25	1
Barium	**0.47**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:25	1
Beryllium	**0.0069**		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:25	1
Boron	**0.20**		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:25	1
Cadmium	**0.0020**	**J**	0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:25	1
Calcium	**49**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:25	1
Chromium	**0.18**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:25	1
Cobalt	**0.048**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:25	1
Iron	**160**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:25	1
Lead	**0.069**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:25	1
Manganese	**0.64**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:25	1
Nickel	**0.19**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:25	1
Potassium	**40**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:25	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:25	1
Silver	**0.011**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:25	1
Zinc	**0.52**	**B**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:25	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:55	05/15/19 18:01	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 20:58	1
Thallium	**0.0040**		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 20:58	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/14/19 10:25	05/15/19 08:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.020	0.0067	mg/Kg	☼	05/10/19 15:10	05/13/19 09:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	05/15/19 10:05	05/15/19 15:24	1
pH	**8.9**		0.2	0.2	SU			05/09/19 13:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B02-2
Date Collected: 05/02/19 13:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-4
Matrix: Solid
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Carbon disulfide	<0.0037		0.0037	0.00076	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Methylene Chloride	**0.0014**	**J**	0.0037	0.0014	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/03/19 17:33	05/06/19 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/03/19 17:33*	*05/06/19 17:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/03/19 17:33*	*05/06/19 17:56*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/03/19 17:33*	*05/06/19 17:56*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/06/19 17:56*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1

Client Sample ID: 2686V2-2-B02-2
Date Collected: 05/02/19 13:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-4
Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2-Methylnaphthalene	**0.018**	**J**	0.076	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Chrysene	**0.012**	**J**	0.037	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1

Client Sample ID: 2686V2-2-B02-2

Date Collected: 05/02/19 13:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-4

Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Phenanthrene	**0.018**	**J**	0.037	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*05/09/19 18:59*	*05/10/19 15:22*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*05/09/19 18:59*	*05/10/19 15:22*	*1*
2-Fluorophenol	*119*		*31 - 166*	*05/09/19 18:59*	*05/10/19 15:22*	*1*
Nitrobenzene-d5	*95*		*37 - 147*	*05/09/19 18:59*	*05/10/19 15:22*	*1*
Phenol-d5	*108*		*30 - 153*	*05/09/19 18:59*	*05/10/19 15:22*	*1*
Terphenyl-d14	*93*		*42 - 157*	*05/09/19 18:59*	*05/10/19 15:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.22**	**J**	1.2	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Arsenic	**4.2**		0.58	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Barium	**48**		0.58	0.066	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Beryllium	**0.67**		0.23	0.054	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Boron	**15**		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Cadmium	**0.18**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Calcium	**76000**	**B**	58	9.8	mg/Kg	☼	05/09/19 15:52	05/13/19 14:58	5
Chromium	**17**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Cobalt	**10**		0.29	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Copper	**20**	**B**	0.58	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Iron	**17000**		12	6.0	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Lead	**10**		0.29	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Magnesium	**31000**		5.8	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Manganese	**370**		0.58	0.084	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Nickel	**28**		0.58	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Potassium	**3300**		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Selenium	**1.0**	**B**	0.58	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Silver	**2.5**		0.29	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Sodium	**210**		58	8.6	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Thallium	**0.60**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Vanadium	**21**		0.29	0.068	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1
Zinc	**49**		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 15:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 11:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 11:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Client Sample ID: 2686V2-2-B02-2
Date Collected: 05/02/19 13:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-4
Matrix: Solid
Percent Solids: 85.3

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:29	1
Barium	**0.078**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:29	1
Boron	**0.065**	**J**	0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:29	1
Calcium	**14**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:29	1
Chromium	**0.023**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:29	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:29	1
Iron	**13**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:29	1
Lead	**0.0089**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:29	1
Manganese	**0.10**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:29	1
Nickel	**0.018**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:29	1
Potassium	**8.5**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:29	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:29	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:29	1
Zinc	**0.24**	**J B**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:29	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:02	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.019	0.0063	mg/Kg	☼	05/10/19 15:10	05/13/19 09:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	05/15/19 10:05	05/15/19 15:24	1
pH	**8.5**		0.2	0.2	SU			05/09/19 13:15	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc. Job ID: 500-162753-1
Project/Site: IDOT - AE7-18A

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact

Andrews Engineering, Inc
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

500-162753 COC

Laboratory

Lab: Test America - Chicago
Address: 2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200
Contact: Dick Wright
email: richard.wright@testamericainc.com

Project Name: ~~[illegible]~~
Project No.: PTB 184-006 / AE7-018A
TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other
Sampler: WILLIAM ULEWICZ

COC No.: 1 of 1
Lab Job No.: 500-162753
Sample Temp: 3.7, 3.6, 2.0

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	2686V2-2-1301-1	5-2-19	1405	S	X	X					X	X	X	X	X					
2	2686V2-2-1301-2	5-2-19	1410																	
3	2686V2-2-1302-1	5-2-19	1350																	
4	2686V2-2-1302-2	5-2-19	1355																	
	~~2686V2-2-1303-1~~																			
	~~2686V2-2-1304-1~~																			
	~~2686V2-2-1304-2~~																			
	~~2686V2-2-1305-1~~																			
	~~2686V2-2-1305-2~~																			
	~~2686V2-2-1305-2 DUP~~																			
	2																			

Relinquished by:		Date/Time 5/3/19 9:45	Received by: JA 5/3/19	Date/Time 945
Relinquished by: JA 5/3/19		Date/Time 1220	Received by: TA-CAL 5/3/19	Date/Time 1220
Relinquished by:		Date/Time	Received by:	Date/Time

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162987-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/22/2019 1:53:00 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-2-B06-1 **Lab Sample ID: 500-162987-1**
Date Collected: 05/07/19 15:30 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 84.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/10/19 16:23*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/08/19 17:33*	*05/10/19 16:23*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/08/19 17:33*	*05/10/19 16:23*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/10/19 16:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1

Client Sample ID: 2686V2-2-B06-1
Date Collected: 05/07/19 15:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-1
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,4-Dinitrophenol	<0.75	F1	0.75	0.66	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
3,3'-Dichlorobenzidine	<0.19	F1	0.19	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Acenaphthene	**0.011**	**J**	0.037	0.0067	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Benzo[a]anthracene	**0.0073**	**J**	0.037	0.0050	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Benzo[a]pyrene	**0.028**	**J**	0.037	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Benzo[b]fluoranthene	**0.015**	**J**	0.037	0.0080	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Chrysene	**0.014**	**J**	0.037	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Fluoranthene	**0.013**	**J**	0.037	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Hexachlorocyclopentadiene	<0.75	F1	0.75	0.21	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1

Client Sample ID: 2686V2-2-B06-1 **Lab Sample ID: 500-162987-1**
Date Collected: 05/07/19 15:30 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 84.7**

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.027**	**J**	0.037	0.0097	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Pentachlorophenol	<0.75	F1	0.75	0.60	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Phenanthrene	**0.0090**	**J**	0.037	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1
Pyrene	**0.013**	**J**	0.037	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*31 - 143*	*05/13/19 16:07*	*05/15/19 16:47*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*05/13/19 16:07*	*05/15/19 16:47*	*1*
2-Fluorophenol	*117*		*31 - 166*	*05/13/19 16:07*	*05/15/19 16:47*	*1*
Nitrobenzene-d5	*89*		*37 - 147*	*05/13/19 16:07*	*05/15/19 16:47*	*1*
Phenol-d5	*91*		*30 - 153*	*05/13/19 16:07*	*05/15/19 16:47*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/13/19 16:07*	*05/15/19 16:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.34**	**J**	1.2	0.22	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Arsenic	**5.6**		0.58	0.20	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Barium	**37**		0.58	0.066	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Beryllium	**0.71**		0.23	0.054	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Boron	**17**		2.9	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Cadmium	**0.22**	**B**	0.12	0.021	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Calcium	**34000**	**B**	12	2.0	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Chromium	**20**		0.58	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Cobalt	**11**		0.29	0.075	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Copper	**22**		0.58	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Iron	**19000**		12	6.0	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Magnesium	**25000**		5.8	2.9	mg/Kg	☼	05/10/19 08:10	05/13/19 18:28	1
Manganese	**310**		0.58	0.083	mg/Kg	☼	05/10/19 08:10	05/13/19 18:28	1
Nickel	**33**		0.58	0.17	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Potassium	**3900**		29	10	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Selenium	**0.89**		0.58	0.34	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Silver	**3.1**		0.29	0.074	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Sodium	**230**	**B**	58	8.5	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Thallium	**0.91**		0.58	0.29	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Vanadium	**25**		0.29	0.068	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1
Zinc	**65**		1.2	0.51	mg/Kg	☼	05/10/19 08:10	05/10/19 19:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:57	05/13/19 14:01	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:01	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:01	1

Client Sample ID: 2686V2-2-B06-1

Date Collected: 05/07/19 15:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-1

Matrix: Solid
Percent Solids: 84.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.77**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:01	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:01	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.034**	**J**	0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:41	1
Barium	**0.33**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:41	1
Beryllium	**0.0059**		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:41	1
Boron	**0.19**		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:41	1
Calcium	**30**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:41	1
Chromium	**0.16**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:41	1
Cobalt	**0.047**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:41	1
Iron	**140**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:41	1
Lead	**0.077**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:41	1
Manganese	**0.50**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:41	1
Nickel	**0.17**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:41	1
Potassium	**38**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:41	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:41	1
Silver	**0.012**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:41	1
Zinc	**0.41**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:41	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:57	05/15/19 19:34	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:18	1
Thallium	**0.0022**		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:18	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 08:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.030**	**B**	0.019	0.0063	mg/Kg	☼	05/15/19 13:40	05/16/19 09:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 11:56	1
pH	**8.3**		0.2	0.2	SU			05/09/19 14:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B06-2
Date Collected: 05/07/19 15:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-2
Matrix: Solid
Percent Solids: 84.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Acetone	**0.016**		0.015	0.0067	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Bromomethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/08/19 17:33*	*05/10/19 16:49*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/08/19 17:33*	*05/10/19 16:49*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*05/08/19 17:33*	*05/10/19 16:49*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/08/19 17:33*	*05/10/19 16:49*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B06-2
Date Collected: 05/07/19 15:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-2
Matrix: Solid
Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2-Methylnaphthalene	**0.010**	**J**	0.079	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Benzo[g,h,i]perylene	**0.021**	**J**	0.039	0.013	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Chrysene	**0.028**	**J**	0.039	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1

Client Sample ID: 2686V2-2-B06-2
Date Collected: 05/07/19 15:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-2
Matrix: Solid
Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Phenanthrene	**0.048**		0.039	0.0055	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1
Pyrene	**0.012**	**J**	0.039	0.0078	mg/Kg	☼	05/13/19 16:07	05/15/19 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*31 - 143*	*05/13/19 16:07*	*05/15/19 19:56*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*05/13/19 16:07*	*05/15/19 19:56*	*1*
2-Fluorophenol	*106*		*31 - 166*	*05/13/19 16:07*	*05/15/19 19:56*	*1*
Nitrobenzene-d5	*89*		*37 - 147*	*05/13/19 16:07*	*05/15/19 19:56*	*1*
Phenol-d5	*96*		*30 - 153*	*05/13/19 16:07*	*05/15/19 19:56*	*1*
Terphenyl-d14	*89*		*42 - 157*	*05/13/19 16:07*	*05/15/19 19:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	**J**	1.1	0.22	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Arsenic	**8.2**		0.57	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Barium	**48**		0.57	0.065	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Beryllium	**0.68**		0.23	0.053	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Boron	**20**		2.8	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Cadmium	**0.23**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Calcium	**70000**	**B**	57	9.6	mg/Kg	☼	05/10/19 08:10	05/13/19 18:36	5
Chromium	**18**		0.57	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Cobalt	**11**		0.28	0.075	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Copper	**20**		0.57	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Iron	**19000**		11	5.9	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	05/10/19 08:10	05/13/19 18:32	1
Manganese	**430**		0.57	0.083	mg/Kg	☼	05/10/19 08:10	05/13/19 18:32	1
Nickel	**29**		0.57	0.17	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Potassium	**4200**		28	10	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Selenium	**0.86**		0.57	0.33	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Silver	**2.5**		0.28	0.073	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Sodium	**250**	**B**	57	8.4	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Thallium	**0.74**		0.57	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Vanadium	**24**		0.28	0.067	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1
Zinc	**51**		1.1	0.50	mg/Kg	☼	05/10/19 08:10	05/10/19 19:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:45	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:45	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B06-2
Date Collected: 05/07/19 15:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-2
Matrix: Solid
Percent Solids: 84.4

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:45	1
Calcium	**14**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:45	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:45	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:45	1
Iron	**0.87**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:45	1
Manganese	**0.011**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:45	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:45	1
Potassium	**1.6**	**J**	2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:45	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:45	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:45	1
Zinc	**0.043**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:45	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/17/19 11:05	05/20/19 09:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.026**	**B**	0.019	0.0064	mg/Kg	☼	05/15/19 13:40	05/16/19 09:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 11:57	1
pH	**8.0**		0.2	0.2	SU			05/09/19 14:56	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B03-1
Date Collected: 05/07/19 14:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-3
Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Methylene Chloride	**0.0022**	**J**	0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/10/19 17:14*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/08/19 17:33*	*05/10/19 17:14*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/10/19 17:14*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/10/19 17:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1

Client Sample ID: 2686V2-2-B03-1
Date Collected: 05/07/19 14:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-3
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Acenaphthene	**0.014**	**J**	0.038	0.0070	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Benzo[a]pyrene	**0.026**	**J**	0.038	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Fluoranthene	**0.0075**	**J**	0.038	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1

Client Sample ID: 2686V2-2-B03-1
Date Collected: 05/07/19 14:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-3
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Phenanthrene	**0.0077**	**J**	0.038	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	05/13/19 16:07	05/15/19 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*31 - 143*	*05/13/19 16:07*	*05/15/19 17:14*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*05/13/19 16:07*	*05/15/19 17:14*	*1*
2-Fluorophenol	*112*		*31 - 166*	*05/13/19 16:07*	*05/15/19 17:14*	*1*
Nitrobenzene-d5	*90*		*37 - 147*	*05/13/19 16:07*	*05/15/19 17:14*	*1*
Phenol-d5	*99*		*30 - 153*	*05/13/19 16:07*	*05/15/19 17:14*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/13/19 16:07*	*05/15/19 17:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.27**	**J**	1.1	0.21	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Arsenic	**6.6**		0.55	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Barium	**51**		0.55	0.062	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Beryllium	**0.73**		0.22	0.051	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Boron	**19**		2.7	0.25	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Cadmium	**0.24**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Calcium	**65000**	**B**	55	9.2	mg/Kg	☼	05/10/19 08:10	05/13/19 18:44	5
Chromium	**20**		0.55	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Cobalt	**13**		0.27	0.071	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Copper	**21**		0.55	0.15	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Iron	**18000**		11	5.7	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Lead	**12**		0.27	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Magnesium	**30000**		5.5	2.7	mg/Kg	☼	05/10/19 08:10	05/13/19 18:40	1
Manganese	**420**		0.55	0.079	mg/Kg	☼	05/10/19 08:10	05/13/19 18:40	1
Nickel	**32**		0.55	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Potassium	**4100**		27	9.7	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Selenium	**1.1**		0.55	0.32	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Silver	**3.0**		0.27	0.070	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Sodium	**730**	**B**	55	8.1	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Thallium	**0.84**		0.55	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Vanadium	**25**		0.27	0.064	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1
Zinc	**59**		1.1	0.48	mg/Kg	☼	05/10/19 08:10	05/10/19 19:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:10	1

Client Sample ID: 2686V2-2-B03-1

Date Collected: 05/07/19 14:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-3

Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:49	1
Barium	**0.077**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:49	1
Boron	**0.058**	**J**	0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:49	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:49	1
Calcium	**12**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:49	1
Chromium	**0.026**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:49	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:49	1
Iron	**19**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:49	1
Lead	**0.017**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:49	1
Manganese	**0.073**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:49	1
Nickel	**0.018**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:49	1
Potassium	**8.9**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:49	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:49	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:49	1
Zinc	**0.16**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:49	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:27	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/17/19 11:05	05/20/19 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**	**B**	0.019	0.0063	mg/Kg	☼	05/15/19 13:40	05/16/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	05/20/19 17:00	05/21/19 11:57	1
pH	**8.1**		0.2	0.2	SU			05/09/19 15:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B03-2
Date Collected: 05/07/19 14:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-4
Matrix: Solid
Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Acetone	**0.0080**	**J**	0.015	0.0065	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/08/19 17:33*	*05/13/19 14:02*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/13/19 14:02*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/08/19 17:33*	*05/13/19 14:02*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/08/19 17:33*	*05/13/19 14:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1

Client Sample ID: 2686V2-2-B03-2
Date Collected: 05/07/19 14:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-4
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Acenaphthene	**0.0088**	**J**	0.038	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Benzo[a]pyrene	**0.026**	**J**	0.038	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Benzo[b]fluoranthene	**0.0092**	**J**	0.038	0.0083	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Benzo[g,h,i]perylene	**0.024**	**J**	0.038	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Chrysene	**0.024**	**J**	0.038	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1

Client Sample ID: 2686V2-2-B03-2
Date Collected: 05/07/19 14:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-4
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.027**	**J**	0.038	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Phenanthrene	**0.0070**	**J**	0.038	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1
Pyrene	**0.017**	**J**	0.038	0.0077	mg/Kg	☼	05/13/19 16:07	05/15/19 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*31 - 143*	*05/13/19 16:07*	*05/15/19 17:41*	*1*
2-Fluorobiphenyl	*90*		*43 - 145*	*05/13/19 16:07*	*05/15/19 17:41*	*1*
2-Fluorophenol	*117*		*31 - 166*	*05/13/19 16:07*	*05/15/19 17:41*	*1*
Nitrobenzene-d5	*92*		*37 - 147*	*05/13/19 16:07*	*05/15/19 17:41*	*1*
Phenol-d5	*105*		*30 - 153*	*05/13/19 16:07*	*05/15/19 17:41*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/13/19 16:07*	*05/15/19 17:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J**	1.1	0.22	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Arsenic	**6.7**		0.57	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Barium	**42**		0.57	0.065	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Beryllium	**0.71**		0.23	0.053	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Boron	**19**		2.8	0.26	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Cadmium	**0.22**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Calcium	**70000**	**B**	57	9.6	mg/Kg	☼	05/10/19 08:10	05/13/19 18:53	5
Chromium	**20**		0.57	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Cobalt	**14**		0.28	0.074	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Copper	**21**		0.57	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Iron	**20000**		11	5.9	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Lead	**12**		0.28	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Magnesium	**31000**		5.7	2.8	mg/Kg	☼	05/10/19 08:10	05/13/19 18:48	1
Manganese	**470**		0.57	0.082	mg/Kg	☼	05/10/19 08:10	05/13/19 18:48	1
Nickel	**33**		0.57	0.17	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Potassium	**4200**		28	10	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Selenium	**1.1**		0.57	0.33	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Silver	**2.9**		0.28	0.073	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Sodium	**860**	**B**	57	8.4	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Thallium	**0.92**		0.57	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Vanadium	**25**		0.28	0.067	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1
Zinc	**57**		1.1	0.50	mg/Kg	☼	05/10/19 08:10	05/10/19 19:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:57	05/13/19 14:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:57	05/13/19 14:14	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:14	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:14	1

Client Sample ID: 2686V2-2-B03-2

Date Collected: 05/07/19 14:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-4

Matrix: Solid
Percent Solids: 84.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:14	1
Manganese	**0.94**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:14	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:14	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.057**		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:53	1
Barium	**0.45**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:53	1
Beryllium	**0.0078**		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:53	1
Boron	**0.27**		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:53	1
Cadmium	**0.0023**	**J**	0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:53	1
Calcium	**96**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:53	1
Chromium	**0.19**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:53	1
Cobalt	**0.058**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:53	1
Iron	**180**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:53	1
Lead	**0.082**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:53	1
Manganese	**0.89**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:53	1
Nickel	**0.21**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:53	1
Potassium	**49**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:53	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:53	1
Silver	**0.014**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:53	1
Zinc	**0.46**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:53	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:57	05/15/19 19:38	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:31	1
Thallium	**0.0026**		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:31	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 09:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**	**B**	0.018	0.0061	mg/Kg	☼	05/15/19 13:40	05/16/19 09:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.17	mg/Kg	☼	05/20/19 17:00	05/21/19 11:58	1
pH	**8.3**		0.2	0.2	SU			05/09/19 15:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B04-1
Date Collected: 05/07/19 14:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-5
Matrix: Solid
Percent Solids: 79.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Methylene Chloride	**0.0024**	**J**	0.0044	0.0017	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/08/19 17:33	05/10/19 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/10/19 18:05*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/10/19 18:05*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/08/19 17:33*	*05/10/19 18:05*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/08/19 17:33*	*05/10/19 18:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1

Client Sample ID: 2686V2-2-B04-1
Date Collected: 05/07/19 14:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-5
Matrix: Solid
Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Benzo[a]anthracene	**0.016**	**J**	0.041	0.0055	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Benzo[a]pyrene	**0.040**	**J**	0.041	0.0079	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Benzo[b]fluoranthene	**0.024**	**J**	0.041	0.0089	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Benzo[k]fluoranthene	**0.012**	**J**	0.041	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Chrysene	**0.016**	**J**	0.041	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Fluoranthene	**0.034**	**J**	0.041	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B04-1
Date Collected: 05/07/19 14:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-5
Matrix: Solid
Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.036**	**J**	0.041	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Phenanthrene	**0.013**	**J**	0.041	0.0057	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1
Pyrene	**0.024**	**J**	0.041	0.0082	mg/Kg	☼	05/13/19 16:07	05/15/19 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*31 - 143*	*05/13/19 16:07*	*05/15/19 18:08*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/13/19 16:07*	*05/15/19 18:08*	*1*
2-Fluorophenol	*105*		*31 - 166*	*05/13/19 16:07*	*05/15/19 18:08*	*1*
Nitrobenzene-d5	*83*		*37 - 147*	*05/13/19 16:07*	*05/15/19 18:08*	*1*
Phenol-d5	*89*		*30 - 153*	*05/13/19 16:07*	*05/15/19 18:08*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/13/19 16:07*	*05/15/19 18:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Arsenic	**8.4**		0.61	0.21	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Barium	**99**		0.61	0.070	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Beryllium	**0.83**		0.25	0.057	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Boron	**12**		3.1	0.29	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Cadmium	**0.59**	**B**	0.12	0.022	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Calcium	**4200**	**B**	12	2.1	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Chromium	**24**		0.61	0.30	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Cobalt	**21**		0.31	0.080	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Copper	**22**		0.61	0.17	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Iron	**24000**		12	6.4	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Lead	**20**		0.31	0.14	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Magnesium	**6100**		6.1	3.0	mg/Kg	☼	05/10/19 08:10	05/13/19 18:57	1
Manganese	**980**		0.61	0.089	mg/Kg	☼	05/10/19 08:10	05/13/19 18:57	1
Nickel	**43**		0.61	0.18	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Potassium	**3100**		31	11	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Selenium	**1.1**		0.61	0.36	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Silver	**4.8**		0.31	0.079	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Sodium	**250**	**B**	61	9.1	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Thallium	**1.2**		0.61	0.31	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Vanadium	**35**		0.31	0.072	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1
Zinc	**100**		1.2	0.54	mg/Kg	☼	05/10/19 08:10	05/10/19 19:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:57	05/13/19 14:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:57	05/13/19 14:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:18	1
Iron	**0.25**	**J**	0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:18	1

Client Sample ID: 2686V2-2-B04-1

Date Collected: 05/07/19 14:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-5

Matrix: Solid
Percent Solids: 79.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:18	1
Manganese	**0.053**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:18	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.054**		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:57	1
Barium	**0.79**		0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:57	1
Beryllium	**0.012**		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:57	1
Boron	**0.28**		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:57	1
Cadmium	**0.0024**	**J**	0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:57	1
Calcium	**33**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:57	1
Chromium	**0.33**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:57	1
Cobalt	**0.071**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:57	1
Iron	**260**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:57	1
Lead	**0.11**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:57	1
Manganese	**0.89**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:57	1
Nickel	**0.29**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:57	1
Potassium	**61**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:57	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:57	1
Silver	**0.020**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:57	1
Zinc	**0.85**		0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:57	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:57	05/15/19 19:42	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:35	1
Thallium	**0.0040**		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:35	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 09:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.042**	**B**	0.020	0.0068	mg/Kg	☼	05/15/19 13:40	05/16/19 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 11:59	1
pH	**8.0**		0.2	0.2	SU			05/09/19 15:07	1

Client Sample ID: 2686V2-2-B04-2

Date Collected: 05/07/19 15:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-6

Matrix: Solid
Percent Solids: 85.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Acetone	**0.011**	**J**	0.015	0.0067	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Bromodichloromethane	<0.0015		0.0015	0.00032	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Chloroethane	<0.0039	*	0.0039	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Vinyl chloride	<0.0015		0.0015	0.00069	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/08/19 17:33*	*05/10/19 18:31*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/10/19 18:31*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/10/19 18:31*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/08/19 17:33*	*05/10/19 18:31*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1

Client Sample ID: 2686V2-2-B04-2
Date Collected: 05/07/19 15:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-6
Matrix: Solid
Percent Solids: 85.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Acenaphthene	**0.0099**	**J**	0.037	0.0068	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Benzo[g,h,i]perylene	**0.020**	**J**	0.037	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Chrysene	**0.027**	**J**	0.037	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Fluoranthene	**0.0089**	**J**	0.037	0.0070	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Fluorene	**0.0078**	**J**	0.037	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B04-2
Date Collected: 05/07/19 15:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-6
Matrix: Solid
Percent Solids: 85.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.026**	**J**	0.037	0.0098	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Phenanthrene	**0.037**		0.037	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1
Pyrene	**0.013**	**J**	0.037	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*31 - 143*	*05/13/19 16:07*	*05/15/19 18:35*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*05/13/19 16:07*	*05/15/19 18:35*	*1*
2-Fluorophenol	*93*		*31 - 166*	*05/13/19 16:07*	*05/15/19 18:35*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*05/13/19 16:07*	*05/15/19 18:35*	*1*
Phenol-d5	*90*		*30 - 153*	*05/13/19 16:07*	*05/15/19 18:35*	*1*
Terphenyl-d14	*96*		*42 - 157*	*05/13/19 16:07*	*05/15/19 18:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.46**	**J**	1.1	0.22	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Arsenic	**4.8**		0.57	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Barium	**46**		0.57	0.065	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Beryllium	**0.59**		0.23	0.053	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Cadmium	**0.19**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Calcium	**70000**	**B**	57	9.6	mg/Kg	☼	05/10/19 08:10	05/13/19 19:13	5
Chromium	**17**		0.57	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Cobalt	**12**		0.28	0.074	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Copper	**20**		0.57	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Iron	**15000**		11	5.9	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Lead	**10**		0.28	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	05/10/19 08:10	05/13/19 19:09	1
Manganese	**410**		0.57	0.082	mg/Kg	☼	05/10/19 08:10	05/13/19 19:09	1
Nickel	**29**		0.57	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Potassium	**3500**		28	10	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Selenium	**0.99**		0.57	0.33	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Silver	**2.3**		0.28	0.073	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Sodium	**380**	**B**	57	8.4	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Thallium	**0.84**		0.57	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Vanadium	**21**		0.28	0.067	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1
Zinc	**49**		1.1	0.50	mg/Kg	☼	05/10/19 08:10	05/10/19 19:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B04-2
Date Collected: 05/07/19 15:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-6
Matrix: Solid
Percent Solids: 85.4

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:01	1
Barium	**0.096**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:01	1
Boron	**0.057**	**J**	0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:01	1
Calcium	**18**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:01	1
Chromium	**0.024**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:01	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:01	1
Iron	**12**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:01	1
Lead	**0.011**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:01	1
Manganese	**0.13**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:01	1
Nickel	**0.017**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:01	1
Potassium	**9.8**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:01	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:01	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:01	1
Zinc	**0.23**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:01	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/17/19 11:05	05/20/19 09:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**	**B**	0.018	0.0060	mg/Kg	☼	05/15/19 13:40	05/16/19 09:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	05/20/19 17:00	05/21/19 11:59	1
pH	**8.3**		0.2	0.2	SU			05/09/19 15:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B05-1
Date Collected: 05/07/19 15:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-7
Matrix: Solid
Percent Solids: 83.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/10/19 18:57*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/08/19 17:33*	*05/10/19 18:57*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*05/08/19 17:33*	*05/10/19 18:57*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/08/19 17:33*	*05/10/19 18:57*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1

Client Sample ID: 2686V2-2-B05-1
Date Collected: 05/07/19 15:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-7
Matrix: Solid
Percent Solids: 83.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Benzo[g,h,i]perylene	**0.017**	**J**	0.037	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Chrysene	**0.027**	**J**	0.037	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Fluoranthene	**0.0071**	**J**	0.037	0.0070	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1

Client Sample ID: 2686V2-2-B05-1
Date Collected: 05/07/19 15:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-7
Matrix: Solid
Percent Solids: 83.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Phenanthrene	**0.019**	**J**	0.037	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1
Pyrene	**0.012**	**J**	0.037	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*31 - 143*	*05/13/19 16:07*	*05/15/19 19:02*	*1*
2-Fluorobiphenyl	*93*		*43 - 145*	*05/13/19 16:07*	*05/15/19 19:02*	*1*
2-Fluorophenol	*110*		*31 - 166*	*05/13/19 16:07*	*05/15/19 19:02*	*1*
Nitrobenzene-d5	*90*		*37 - 147*	*05/13/19 16:07*	*05/15/19 19:02*	*1*
Phenol-d5	*103*		*30 - 153*	*05/13/19 16:07*	*05/15/19 19:02*	*1*
Terphenyl-d14	*97*		*42 - 157*	*05/13/19 16:07*	*05/15/19 19:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J**	1.1	0.22	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Arsenic	**3.3**		0.56	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Barium	**40**		0.56	0.063	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Beryllium	**0.73**		0.22	0.052	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Boron	**19**		2.8	0.26	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Cadmium	**0.27**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Calcium	**66000**	**B**	56	9.4	mg/Kg	☼	05/10/19 08:10	05/13/19 19:21	5
Chromium	**20**		0.56	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Cobalt	**11**		0.28	0.073	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Copper	**21**		0.56	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Iron	**18000**		11	5.8	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Magnesium	**29000**		5.6	2.8	mg/Kg	☼	05/10/19 08:10	05/13/19 19:17	1
Manganese	**330**		0.56	0.080	mg/Kg	☼	05/10/19 08:10	05/13/19 19:17	1
Nickel	**32**		0.56	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Potassium	**4300**		28	9.8	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Selenium	**1.1**		0.56	0.33	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Silver	**3.0**		0.28	0.072	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Sodium	**1200**	**B**	56	8.2	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Thallium	**0.68**		0.56	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Vanadium	**27**		0.28	0.066	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1
Zinc	**64**		1.1	0.49	mg/Kg	☼	05/10/19 08:10	05/10/19 19:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:26	1
Manganese	**1.1**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B05-1
Date Collected: 05/07/19 15:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-7
Matrix: Solid
Percent Solids: 83.9

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:05	1
Barium	**0.17**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:05	1
Boron	**0.12**		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:05	1
Calcium	**32**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:05	1
Chromium	**0.053**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:05	1
Cobalt	**0.018**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:05	1
Iron	**33**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:05	1
Lead	**0.027**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:05	1
Manganese	**0.26**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:05	1
Nickel	**0.044**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:05	1
Potassium	**18**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:05	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:05	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:05	1
Zinc	**0.094**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:05	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:43	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**	**B**	0.019	0.0062	mg/Kg	☼	05/15/19 13:40	05/16/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/20/19 10:40	05/20/19 14:35	1
pH	**8.8**		0.2	0.2	SU			05/09/19 15:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B05-2
Date Collected: 05/07/19 15:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-8
Matrix: Solid
Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Chloroethane	<0.0039	*	0.0039	0.0011	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/08/19 17:33	05/10/19 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/08/19 17:33*	*05/10/19 19:22*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/10/19 19:22*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/10/19 19:22*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/08/19 17:33*	*05/10/19 19:22*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1

Client Sample ID: 2686V2-2-B05-2
Date Collected: 05/07/19 15:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-8
Matrix: Solid
Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2-Methylnaphthalene	**0.0096**	**J**	0.078	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Benzo[g,h,i]perylene	**0.020**	**J**	0.039	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Chrysene	**0.025**	**J**	0.039	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1

Client Sample ID: 2686V2-2-B05-2 **Lab Sample ID: 500-162987-8**
Date Collected: 05/07/19 15:20 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 84.5**

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.027	J	0.039	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Phenanthrene	0.038	J	0.039	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1
Pyrene	0.010	J	0.039	0.0077	mg/Kg	☼	05/13/19 16:07	05/15/19 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*31 - 143*	*05/13/19 16:07*	*05/15/19 19:29*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*05/13/19 16:07*	*05/15/19 19:29*	*1*
2-Fluorophenol	*96*		*31 - 166*	*05/13/19 16:07*	*05/15/19 19:29*	*1*
Nitrobenzene-d5	*80*		*37 - 147*	*05/13/19 16:07*	*05/15/19 19:29*	*1*
Phenol-d5	*88*		*30 - 153*	*05/13/19 16:07*	*05/15/19 19:29*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/13/19 16:07*	*05/15/19 19:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.24	J	1.2	0.23	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Arsenic	4.9		0.58	0.20	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Barium	43		0.58	0.067	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Beryllium	0.64		0.23	0.055	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Boron	18		2.9	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Cadmium	0.23	B	0.12	0.021	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Calcium	75000	B	58	9.9	mg/Kg	☼	05/10/19 08:10	05/13/19 19:29	5
Chromium	19		0.58	0.29	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Cobalt	15		0.29	0.077	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Copper	21		0.58	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Iron	16000		12	6.1	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Lead	11		0.29	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Magnesium	33000		5.8	2.9	mg/Kg	☼	05/10/19 08:10	05/13/19 19:25	1
Manganese	420		0.58	0.085	mg/Kg	☼	05/10/19 08:10	05/13/19 19:25	1
Nickel	34		0.58	0.17	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Potassium	3900		29	10	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Selenium	1.1		0.58	0.34	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Silver	2.6		0.29	0.075	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Sodium	460	B	58	8.6	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Thallium	0.68		0.58	0.29	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Vanadium	23		0.29	0.069	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1
Zinc	58		1.2	0.51	mg/Kg	☼	05/10/19 08:10	05/10/19 19:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:31	1
Manganese	1.5		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:31	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B05-2

Date Collected: 05/07/19 15:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-8

Matrix: Solid
Percent Solids: 84.5

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:09	1
Barium	**0.22**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:09	1
Boron	**0.14**		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:09	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:09	1
Calcium	**38**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:09	1
Chromium	**0.072**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:09	1
Cobalt	**0.027**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:09	1
Iron	**41**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:09	1
Lead	**0.031**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:09	1
Manganese	**0.40**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:09	1
Nickel	**0.060**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:09	1
Potassium	**24**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:09	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:09	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:09	1
Zinc	**0.38**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:09	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:47	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 09:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**	**B**	0.018	0.0062	mg/Kg	☼	05/15/19 13:40	05/16/19 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	05/20/19 10:40	05/20/19 14:35	1
pH	**8.3**		0.2	0.2	SU			05/09/19 15:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B05-2 Dup

Date Collected: 05/07/19 15:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-9

Matrix: Solid
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Acetone	**0.0066**	**J**	0.015	0.0066	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 134*	*05/08/19 17:33*	*05/13/19 14:28*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/08/19 17:33*	*05/13/19 14:28*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/08/19 17:33*	*05/13/19 14:28*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/08/19 17:33*	*05/13/19 14:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1

Client Sample ID: 2686V2-2-B05-2 Dup
Date Collected: 05/07/19 15:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-9
Matrix: Solid
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2-Methylnaphthalene	**0.010**	**J**	0.080	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.039	0.013	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Chrysene	**0.028**	**J**	0.039	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1

Client Sample ID: 2686V2-2-B05-2 Dup

Date Collected: 05/07/19 15:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-9

Matrix: Solid
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Phenanthrene	**0.037**	**J**	0.039	0.0055	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1
Pyrene	**0.0085**	**J**	0.039	0.0078	mg/Kg	☼	05/13/19 16:07	05/15/19 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*80*		*31 - 143*	*05/13/19 16:07*	*05/15/19 18:31*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/13/19 16:07*	*05/15/19 18:31*	*1*
2-Fluorophenol	*81*		*31 - 166*	*05/13/19 16:07*	*05/15/19 18:31*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*05/13/19 16:07*	*05/15/19 18:31*	*1*
Phenol-d5	*84*		*30 - 153*	*05/13/19 16:07*	*05/15/19 18:31*	*1*
Terphenyl-d14	*100*		*42 - 157*	*05/13/19 16:07*	*05/15/19 18:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Arsenic	**5.2**		0.58	0.20	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Barium	**56**		0.58	0.066	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Beryllium	**0.71**		0.23	0.054	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Boron	**20**		2.9	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Cadmium	**0.18**	**B**	0.12	0.021	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Calcium	**72000**	**B**	58	9.8	mg/Kg	☼	05/10/19 08:10	05/13/19 19:37	5
Chromium	**20**		0.58	0.29	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Cobalt	**13**		0.29	0.076	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Copper	**20**		0.58	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Iron	**17000**		12	6.0	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Lead	**11**		0.29	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Magnesium	**31000**		5.8	2.9	mg/Kg	☼	05/10/19 08:10	05/13/19 19:33	1
Manganese	**400**		0.58	0.084	mg/Kg	☼	05/10/19 08:10	05/13/19 19:33	1
Nickel	**33**		0.58	0.17	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Potassium	**4500**		29	10	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Selenium	**1.2**		0.58	0.34	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Silver	**2.6**		0.29	0.075	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Sodium	**320**	**B**	58	8.6	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Thallium	**0.67**		0.58	0.29	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Vanadium	**24**		0.29	0.068	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1
Zinc	**51**		1.2	0.51	mg/Kg	☼	05/10/19 08:10	05/10/19 19:38	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:21	1
Barium	**0.061**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:21	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Client Sample ID: 2686V2-2-B05-2 Dup
Date Collected: 05/07/19 15:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-9
Matrix: Solid
Percent Solids: 83.5

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:21	1
Calcium	**15**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:21	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:21	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:21	1
Iron	**3.1**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:21	1
Manganese	**0.036**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:21	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:21	1
Potassium	**3.7**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:21	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:21	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:21	1
Zinc	**0.049**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:21	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 20:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 20:04	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/17/19 11:05	05/20/19 09:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**	**B**	0.019	0.0062	mg/Kg	☼	05/15/19 13:40	05/16/19 09:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/20/19 10:40	05/20/19 14:36	1
pH	**8.2**		0.2	0.2	SU			05/09/19 15:22	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey 500-162987 COC email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: [redacted] Project No.: PTB 184-006/[redacted]018A TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other Sampler: Will Wlewicz

COC No.: 1 of 1

Lab Job No.: 500-162987

Sample Temp: 3.1 5.0 2.8 3.5 5/8/19

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	8686V2-2-B06-1	5-7-19	1530	S	X	X					X	X	X	X	X					
2	2686V2-2-B06-2		1535																	
3	26860V2-2-B03-1		1440																	
4	26860V2-2-B03-2		1445																	
5	26860V2-2-B04-1		1455																	
6	26860V2-2-B04-2		1500																	
7	2686V2-2-B05-1		1515																	
8	2686V2-2-B05-2		1520																	
9	2686V2-2-B05-2 DUP		1525																	
10	Trip Blank #2			S	X															

Relinquished by:	Date/Time 5/8/19 1053	Received by:	Date/Time 5/8/19 1032
Relinquished by:	Date/Time 5/8/19 1122	Received by:	Date/Time 5/8/19 1122
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):
680-688 West Deerpath Road

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24722 (Decimal Degrees) Longitude: -87.86294 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 348

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24722 Longitude: - 87.86294

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-3-B01 AND 2686V2-3-B02 WERE SAMPLED ADJACENT TO SITE 2686V2-3. SEE TABLE 3b AND FIGURES 2 AND 3 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-162753-2 AND 500-162987-2

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.
Street Address:	420 Eisenhower Lane North
City:	Lombard State: IL Zip Code: 60148
Phone:	630-953-3332

Savo Radulovic
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

P.E or L.P.G. Seal:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-3
Faith Lutheran Church and Rectory

Sample ID	2686V2-3-B01-1	2686V2-3-B01-2	2686V2-3-B02-1	2686V2-3-B02-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-7	7-14	0-7	7-14					
Sample Date	5/2/2019	5/2/2019	5/7/2019	5/7/2019					
PID	0	0	0	0					
Sample pH	8.5	8.6	8.4	7.9	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.									

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162753-2
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/20/2019 4:13:36 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-3-B01-1
Date Collected: 05/02/19 13:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-5
Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/03/19 17:33	05/06/19 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*05/03/19 17:33*	*05/06/19 18:22*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/03/19 17:33*	*05/06/19 18:22*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/03/19 17:33*	*05/06/19 18:22*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/06/19 18:22*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1

Client Sample ID: 2686V2-3-B01-1
Date Collected: 05/02/19 13:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-5
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Benzo[a]pyrene	**0.024**	**J**	0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Chrysene	**0.017**	**J**	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1

Client Sample ID: 2686V2-3-B01-1
Date Collected: 05/02/19 13:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-5
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.026	J	0.038	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1
Pyrene	0.0092	J	0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*05/09/19 18:59*	*05/10/19 15:49*	*1*
2-Fluorobiphenyl	*86*		*43 - 145*	*05/09/19 18:59*	*05/10/19 15:49*	*1*
2-Fluorophenol	*110*		*31 - 166*	*05/09/19 18:59*	*05/10/19 15:49*	*1*
Nitrobenzene-d5	*90*		*37 - 147*	*05/09/19 18:59*	*05/10/19 15:49*	*1*
Phenol-d5	*99*		*30 - 153*	*05/09/19 18:59*	*05/10/19 15:49*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/09/19 18:59*	*05/10/19 15:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.1	0.21	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Arsenic	6.8		0.54	0.18	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Barium	34		0.54	0.061	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Beryllium	0.65		0.21	0.050	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Boron	15		2.7	0.25	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Cadmium	0.24	B	0.11	0.019	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Calcium	82000	B	54	9.1	mg/Kg	☼	05/09/19 15:52	05/13/19 15:02	5
Chromium	16		0.54	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Cobalt	10		0.27	0.070	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Copper	22	B	0.54	0.15	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Iron	17000		11	5.6	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Lead	12		0.27	0.12	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Magnesium	32000		5.4	2.7	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Manganese	450		0.54	0.078	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Nickel	29		0.54	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Potassium	3300		27	9.5	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Selenium	1.1	B	0.54	0.31	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Silver	2.6		0.27	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Sodium	170		54	7.9	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Thallium	0.67		0.54	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Vanadium	21		0.27	0.063	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1
Zinc	52		1.1	0.47	mg/Kg	☼	05/09/19 15:52	05/10/19 15:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 11:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 11:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-2

Client Sample ID: 2686V2-3-B01-1
Date Collected: 05/02/19 13:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-5
Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:33	1
Barium	**0.093**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:33	1
Boron	**0.074**	**J**	0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:33	1
Calcium	**17**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:33	1
Chromium	**0.034**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:33	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:33	1
Iron	**26**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:33	1
Lead	**0.014**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:33	1
Manganese	**0.14**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:33	1
Nickel	**0.030**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:33	1
Potassium	**12**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:33	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:33	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:33	1
Zinc	**0.10**	**J B**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:33	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:06	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.018	0.0061	mg/Kg	☼	05/10/19 15:10	05/13/19 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:24	1
pH	**8.5**		0.2	0.2	SU			05/09/19 13:18	1

Client Sample ID: 2686V2-3-B01-2 **Lab Sample ID: 500-162753-6**
Date Collected: 05/02/19 13:30 **Matrix: Solid**
Date Received: 05/03/19 12:20 **Percent Solids: 84.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Acetone	**0.0088**	**J**	0.015	0.0066	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/03/19 17:33*	*05/07/19 11:34*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/03/19 17:33*	*05/07/19 11:34*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/03/19 17:33*	*05/07/19 11:34*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/07/19 11:34*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1

Client Sample ID: 2686V2-3-B01-2
Date Collected: 05/02/19 13:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-6
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2-Methylnaphthalene	**0.0073**	**J**	0.076	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Benzo[b]fluoranthene	<0.038		0.038	0.0081	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Chrysene	**0.011**	**J**	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1

Client Sample ID: 2686V2-3-B01-2
Date Collected: 05/02/19 13:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-6
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Phenanthrene	**0.022**	**J**	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*05/09/19 18:59*	*05/10/19 16:16*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*05/09/19 18:59*	*05/10/19 16:16*	*1*
2-Fluorophenol	*118*		*31 - 166*	*05/09/19 18:59*	*05/10/19 16:16*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*05/09/19 18:59*	*05/10/19 16:16*	*1*
Phenol-d5	*104*		*30 - 153*	*05/09/19 18:59*	*05/10/19 16:16*	*1*
Terphenyl-d14	*92*		*42 - 157*	*05/09/19 18:59*	*05/10/19 16:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Arsenic	**5.0**		0.57	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Barium	**58**		0.57	0.065	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Beryllium	**0.70**		0.23	0.053	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Boron	**16**		2.8	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Cadmium	**0.20**	**B**	0.11	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Calcium	**74000**	**B**	57	9.7	mg/Kg	☼	05/09/19 15:52	05/13/19 15:05	5
Chromium	**18**		0.57	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Cobalt	**13**		0.28	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Copper	**20**	**B**	0.57	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Iron	**17000**		11	5.9	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Magnesium	**29000**		5.7	2.8	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Manganese	**390**		0.57	0.083	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Nickel	**32**		0.57	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Potassium	**3700**		28	10	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Selenium	**0.67**	**B**	0.57	0.33	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Silver	**2.5**		0.28	0.073	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Sodium	**200**		57	8.4	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Thallium	**0.66**		0.57	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Vanadium	**21**		0.28	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1
Zinc	**48**		1.1	0.50	mg/Kg	☼	05/09/19 15:52	05/10/19 15:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.74**		0.20	0.20	mg/L		05/11/19 15:55	05/13/19 11:56	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-2

Client Sample ID: 2686V2-3-B01-2
Date Collected: 05/02/19 13:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-6
Matrix: Solid
Percent Solids: 84.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:37	1
Barium	**0.062**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:37	1
Boron	**0.050**	**J**	0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:37	1
Calcium	**16**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:37	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:37	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:37	1
Iron	**5.6**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:37	1
Manganese	**0.059**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:37	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:37	1
Potassium	**5.4**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:37	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:37	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:37	1
Zinc	**0.47**	**J B**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:37	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:11	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.019	0.0062	mg/Kg	☼	05/10/19 15:10	05/13/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:25	1
pH	**8.6**		0.2	0.2	SU			05/09/19 13:22	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-2

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	Project Name: ~~[illegible]~~	COC No.: 1 of 1
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project No.: PTB 184-006/AE7-018A TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ___ Other **Sampler:** W. Ulewicz	Lab Job No.: 500-162753 Sample Temp:

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
5	2686V2-3-1301-1	5-2-19	1325	S	X	X					X	X	X	X	X					
6	2686V2-3-1301-2	5-2-19	1330		↓	↓					↓	↓	↓	↓	↓					
	~~2686V2-3-1302-1~~																			
	~~2686V2-3-1302-2~~			↓																

Matrix Key:

W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	5/2/19 9:45	[signature] TA 5/3/19	945
[signature] TA 5/3/19	1220	[signature] TA-CHI	5/3/19 1220
Relinquished by:	Date/Time	Received by:	Date/Time

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162987-2
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/22/2019 1:53:26 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-3-B02-1 **Lab Sample ID: 500-162987-11**
Date Collected: 05/07/19 14:15 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 85.8**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Carbon disulfide	<0.0037		0.0037	0.00076	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Methylene Chloride	**0.0016**	**J**	0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/08/19 17:33	05/13/19 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/13/19 14:54*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 131*	*05/08/19 17:33*	*05/13/19 14:54*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/08/19 17:33*	*05/13/19 14:54*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/13/19 14:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-2

Client Sample ID: 2686V2-3-B02-1
Date Collected: 05/07/19 14:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-11
Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Benzo[b]fluoranthene	**0.0083**	**J**	0.038	0.0083	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Benzo[g,h,i]perylene	**0.017**	**J**	0.038	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Chrysene	**0.021**	**J**	0.038	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1

Client Sample ID: 2686V2-3-B02-1 **Lab Sample ID: 500-162987-11**
Date Collected: 05/07/19 14:15 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 85.8**

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Phenanthrene	**0.0083**	**J**	0.038	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1
Pyrene	**0.010**	**J**	0.038	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*31 - 143*	*05/13/19 16:07*	*05/15/19 18:55*	*1*
2-Fluorobiphenyl	*83*		*43 - 145*	*05/13/19 16:07*	*05/15/19 18:55*	*1*
2-Fluorophenol	*81*		*31 - 166*	*05/13/19 16:07*	*05/15/19 18:55*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*05/13/19 16:07*	*05/15/19 18:55*	*1*
Phenol-d5	*83*		*30 - 153*	*05/13/19 16:07*	*05/15/19 18:55*	*1*
Terphenyl-d14	*100*		*42 - 157*	*05/13/19 16:07*	*05/15/19 18:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.29**	**J**	1.1	0.21	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Arsenic	**6.2**		0.53	0.18	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Barium	**52**		0.53	0.061	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Beryllium	**0.76**		0.21	0.050	mg/Kg	☼	05/10/19 08:10	05/13/19 19:41	1
Boron	**18**		2.7	0.25	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Calcium	**71000**	**B**	53	9.0	mg/Kg	☼	05/10/19 08:10	05/13/19 19:45	5
Chromium	**19**		0.53	0.26	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Cobalt	**16**		0.27	0.070	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Copper	**20**		0.53	0.15	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Iron	**18000**		11	5.5	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Lead	**11**		0.27	0.12	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Magnesium	**31000**		5.3	2.6	mg/Kg	☼	05/10/19 08:10	05/13/19 19:41	1
Manganese	**460**		0.53	0.077	mg/Kg	☼	05/10/19 08:10	05/13/19 19:41	1
Nickel	**33**		0.53	0.15	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Potassium	**4200**		27	9.4	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Selenium	**1.2**		0.53	0.31	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Silver	**2.8**		0.27	0.069	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Sodium	**280**	**B**	53	7.9	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Thallium	**0.75**		0.53	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Vanadium	**23**		0.27	0.063	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1
Zinc	**54**		1.1	0.47	mg/Kg	☼	05/10/19 08:10	05/10/19 19:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:57	05/13/19 14:47	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:47	1
Iron	**0.43**		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:47	1

Client Sample ID: 2686V2-3-B02-1
Date Collected: 05/07/19 14:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-11
Matrix: Solid
Percent Solids: 85.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.44**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:47	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.044**	**J**	0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:25	1
Barium	**0.48**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:25	1
Beryllium	**0.0069**		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:25	1
Boron	**0.24**		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:25	1
Calcium	**85**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:25	1
Chromium	**0.17**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:25	1
Cobalt	**0.047**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:25	1
Iron	**140**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:25	1
Lead	**0.066**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:25	1
Manganese	**0.69**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:25	1
Nickel	**0.19**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:25	1
Potassium	**46**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:25	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:25	1
Silver	**0.013**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:25	1
Zinc	**0.65**		0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:25	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:57	05/15/19 19:46	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 20:08	1
Thallium	**0.0021**		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 20:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**	**B**	0.018	0.0061	mg/Kg	☼	05/15/19 13:40	05/16/19 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.18	mg/Kg	☼	05/20/19 10:40	05/20/19 14:36	1
pH	**8.4**		0.2	0.2	SU			05/09/19 15:30	1

Client Sample ID: 2686V2-3-B02-2 **Lab Sample ID: 500-162987-12**
Date Collected: 05/07/19 14:20 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 86.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/08/19 17:33	05/13/19 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 134*	*05/08/19 17:33*	*05/13/19 15:20*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/08/19 17:33*	*05/13/19 15:20*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/08/19 17:33*	*05/13/19 15:20*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/08/19 17:33*	*05/13/19 15:20*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-2

Client Sample ID: 2686V2-3-B02-2
Date Collected: 05/07/19 14:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-12
Matrix: Solid
Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.037	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Chrysene	**0.032**	**J**	0.037	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Fluorene	**0.0056**	**J**	0.037	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-2

Client Sample ID: 2686V2-3-B02-2
Date Collected: 05/07/19 14:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-12
Matrix: Solid
Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Phenanthrene	**0.026**	**J**	0.037	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1
Pyrene	**0.010**	**J**	0.037	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*80*		*31 - 143*	*05/13/19 16:07*	*05/15/19 19:19*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/13/19 16:07*	*05/15/19 19:19*	*1*
2-Fluorophenol	*83*		*31 - 166*	*05/13/19 16:07*	*05/15/19 19:19*	*1*
Nitrobenzene-d5	*73*		*37 - 147*	*05/13/19 16:07*	*05/15/19 19:19*	*1*
Phenol-d5	*87*		*30 - 153*	*05/13/19 16:07*	*05/15/19 19:19*	*1*
Terphenyl-d14	*107*		*42 - 157*	*05/13/19 16:07*	*05/15/19 19:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J F1**	1.1	0.21	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Arsenic	**7.6**	**F1**	0.54	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Barium	**24**		0.54	0.062	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Beryllium	**0.53**		0.22	0.051	mg/Kg	☼	05/10/19 08:10	05/13/19 20:01	1
Boron	**15**		2.7	0.25	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Cadmium	**0.29**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Calcium	**100000**	**B**	54	9.2	mg/Kg	☼	05/10/19 08:10	05/13/19 20:05	5
Chromium	**11**	**F1**	0.54	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Cobalt	**12**		0.27	0.071	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Copper	**19**		0.54	0.15	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Iron	**14000**		11	5.6	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Lead	**12**	**F1**	0.27	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Magnesium	**60000**		27	13	mg/Kg	☼	05/10/19 08:10	05/13/19 20:05	5
Manganese	**730**		0.54	0.079	mg/Kg	☼	05/10/19 08:10	05/13/19 20:01	1
Nickel	**26**		0.54	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Potassium	**2800**		27	9.6	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Selenium	**0.80**	**F1**	0.54	0.32	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Silver	**1.6**		0.27	0.070	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Sodium	**190**	**B**	54	8.0	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Thallium	**0.52**	**J F1**	0.54	0.27	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Vanadium	**15**		0.27	0.064	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1
Zinc	**48**	**F1**	1.1	0.48	mg/Kg	☼	05/10/19 08:10	05/10/19 19:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:29	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:29	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:29	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-2

Client Sample ID: 2686V2-3-B02-2
Date Collected: 05/07/19 14:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-12
Matrix: Solid
Percent Solids: 86.4

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:29	1
Calcium	**27**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:29	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:29	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:29	1
Iron	**0.25**	**J**	0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:29	1
Manganese	**0.021**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:29	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:29	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:29	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:29	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:29	1
Zinc	**0.056**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:29	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 20:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 20:12	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/17/19 11:05	05/20/19 09:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**	**B**	0.018	0.0061	mg/Kg	☼	05/15/19 13:40	05/16/19 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	05/20/19 10:40	05/20/19 14:36	1
pH	**7.9**		0.2	0.2	SU			05/09/19 15:33	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-2

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com

Project Name: AE7-018A

Project No.: PTB 184-006/018A

TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: Mike Ulewicz

COC No.: 1 of 1

Lab Job No.: 500-16298?

Sample Temp: 5.0, 2.8, 3.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
11	2686V2-3-B02-1	5-7-19	1415	S	X	X					X	X	X	X	X					
12	2686V2-3-B02-2	↓	1420	↓	↓	↓					↓	↓	↓	↓	↓					

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Relinquished by:	Date/Time 5/8/19 1030	Received by:	Date/Time 5/8/19 1030
Relinquished by:	Date/Time 5/8/19 1122	Received by:	Date/Time 5/8/19 1122
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):

US 41 btwn mile markers 45 & 47; approx. southbound US41 ramp sta. 349+00 RT & LT; northbound ramp sta. 449+00 RT & LT

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24741 (Decimal Degrees) Longitude: -87.86247 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: 0970805103 BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 1,899

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24741 Longitude: - 87.86247

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-4-B01 THROUGH 2686V2-4-B11 WERE SAMPLED ADJACENT TO SITE 2686V2-4. SEE TABLE 3c AND FIGURES 3 AND 7 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-162987-3 AND 500-162753-3

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.
Street Address:	420 Eisenhower Lane North
City:	Lombard State: IL Zip Code: 60148
Phone:	630-953-3332

Savo Radulovic
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

P.E or L.P.G. Seal:

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-4
ROW

Sample ID	2686V2-4-B01	2686V2-4-B02	2686V2-4-B03	2686V2-4-B04-1	2686V2-4-B04-2	2686V2-4-B04-2 DUP	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-6	0-8	0-6	0-6	6-12					
Sample Date	5/7/2019	5/2/2019	5/2/2019	5/2/2019	5/2/2019	5/2/2019					
PID	0	0	0	0	0	0					
Sample pH	8.1	8.1	8.3	8.8	8.5	8.4	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.											

Sample ID	2686V2-4-B05	2686V2-4-B06	2686V2-4-B07	2686V2-4-B08-1	2686V2-4-B08-2	2686V2-4-B09-1	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-6	0-8	0-6	6-12	0-7.5					
Sample Date	5/2/2019	5/2/2019	5/2/2019	5/2/2019	5/2/2019	5/2/2019					
PID	0	0	0	0	0	0					
Sample pH	8	8.4	8.3	8.4	8.6	8.3	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.											

Sample ID	2686V2-4-B09-2	2686V2-4-B10-1	2686V2-4-B10-2	2686V2-4-B10-2 DUP	2686V2-4-B11	Maximum Allowable Concentration				
Sample Depth (ft)	7.5-15	0-8	8-16	8-16	0-8					
Sample Date	5/2/2019	5/2/2019	5/2/2019	5/2/2019	5/2/2019					
PID	0	0	0	0	0					
Sample pH	8.1	7.9	8.5	8.3	8.9	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.										

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162987-3
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/22/2019 1:53:46 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-4-B01 **Lab Sample ID: 500-162987-13**
Date Collected: 05/07/19 15:40 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 84.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/08/19 17:33	05/13/19 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/13/19 15:46*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/08/19 17:33*	*05/13/19 15:46*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/13/19 15:46*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/13/19 15:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-3

Client Sample ID: 2686V2-4-B01
Date Collected: 05/07/19 15:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-13
Matrix: Solid
Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.038	0.012	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Chrysene	**0.030**	**J**	0.038	0.010	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-3

Client Sample ID: 2686V2-4-B01
Date Collected: 05/07/19 15:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-13
Matrix: Solid
Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Phenanthrene	**0.0099**	**J**	0.038	0.0053	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1
Pyrene	**0.015**	**J**	0.038	0.0076	mg/Kg	☼	05/13/19 16:07	05/15/19 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*05/13/19 16:07*	*05/15/19 20:06*	*1*
2-Fluorobiphenyl	*86*		*43 - 145*	*05/13/19 16:07*	*05/15/19 20:06*	*1*
2-Fluorophenol	*84*		*31 - 166*	*05/13/19 16:07*	*05/15/19 20:06*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*05/13/19 16:07*	*05/15/19 20:06*	*1*
Phenol-d5	*88*		*30 - 153*	*05/13/19 16:07*	*05/15/19 20:06*	*1*
Terphenyl-d14	*104*		*42 - 157*	*05/13/19 16:07*	*05/15/19 20:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.24**	**J**	1.1	0.22	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Arsenic	**4.8**		0.56	0.19	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Barium	**51**		0.56	0.064	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Beryllium	**0.78**		0.23	0.053	mg/Kg	☼	05/10/19 08:10	05/13/19 20:50	1
Boron	**18**		2.8	0.26	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Cadmium	**0.20**	**B**	0.11	0.020	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Calcium	**69000**	**B**	56	9.5	mg/Kg	☼	05/10/19 08:10	05/13/19 20:54	5
Chromium	**20**		0.56	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Cobalt	**12**		0.28	0.074	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Copper	**20**		0.56	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Iron	**18000**		11	5.9	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Magnesium	**31000**		5.6	2.8	mg/Kg	☼	05/10/19 08:10	05/13/19 20:50	1
Manganese	**450**		0.56	0.082	mg/Kg	☼	05/10/19 08:10	05/13/19 20:50	1
Nickel	**32**		0.56	0.16	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Potassium	**4200**		28	10	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Selenium	**1.1**		0.56	0.33	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Silver	**2.9**		0.28	0.073	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Sodium	**210**	**B**	56	8.3	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Thallium	**0.64**		0.56	0.28	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Vanadium	**23**		0.28	0.066	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1
Zinc	**57**		1.1	0.49	mg/Kg	☼	05/10/19 08:10	05/10/19 20:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 14:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 14:56	1
Manganese	**0.99**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 14:56	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-3

Client Sample ID: 2686V2-4-B01
Date Collected: 05/07/19 15:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162987-13
Matrix: Solid
Percent Solids: 84.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.014**	**J**	0.050	0.010	mg/L		05/11/19 15:53	05/13/19 22:33	1
Barium	**0.25**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 22:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 22:33	1
Boron	**0.16**	**F1**	0.10	0.050	mg/L		05/11/19 15:53	05/13/19 22:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 22:33	1
Calcium	**45**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:33	1
Chromium	**0.086**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:33	1
Cobalt	**0.028**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:33	1
Iron	**66**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 22:33	1
Lead	**0.038**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 22:33	1
Manganese	**0.40**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:33	1
Nickel	**0.082**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:33	1
Potassium	**26**	**F1**	2.5	0.50	mg/L		05/11/19 15:53	05/13/19 22:33	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 22:33	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 22:33	1
Zinc	**0.29**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 22:33	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 20:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 20:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/17/19 11:05	05/20/19 09:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.026**	**B**	0.019	0.0062	mg/Kg	☼	05/15/19 13:40	05/16/19 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/20/19 10:40	05/20/19 14:37	1
pH	**8.1**		0.2	0.2	SU			05/09/19 15:37	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162987-3

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING

Client Contact	Laboratory
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com

Project Name: AE7-018A

Project No.: PTB 184-006/018A

TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other

Sampler: Will Ulewicz

COC No.: 1 of 1

Lab Job No.: 500-162987

Sample Temp: 2.8, 3.1, 5.0

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:

W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
13	260602-4-B01	5-7-19	1540	S	X	X					X	X	X	X	X					

Relinquished by:		Date/Time 5/8/19 1030	Received by:	Date/Time 5/8/19 1030
Relinquished by:		Date/Time 5/8/19 1122	Received by:	Date/Time 5/8/19 1122
Relinquished by:		Date/Time	Received by:	Date/Time

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162753-3
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/20/2019 4:13:52 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B04-1
Date Collected: 05/02/19 08:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-7
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Acetone	**0.0080**	**J**	0.016	0.0070	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Ethylbenzene	**0.0010**	**J**	0.0016	0.00077	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Methylene Chloride	**0.0020**	**J**	0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1
Xylenes, Total	**0.0048**		0.0032	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/03/19 17:33*	*05/07/19 12:00*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/03/19 17:33*	*05/07/19 12:00*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/03/19 17:33*	*05/07/19 12:00*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/03/19 17:33*	*05/07/19 12:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1

Client Sample ID: 2686V2-4-B04-1
Date Collected: 05/02/19 08:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-7
Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2-Methylnaphthalene	**0.013**	**J**	0.078	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Benzo[a]pyrene	**0.031**	**J**	0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Benzo[b]fluoranthene	**0.016**	**J**	0.038	0.0084	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Chrysene	**0.019**	**J**	0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Fluoranthene	**0.026**	**J**	0.038	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Fluorene	**0.0084**	**J**	0.038	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1

Client Sample ID: 2686V2-4-B04-1
Date Collected: 05/02/19 08:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-7
Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.028	J	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Naphthalene	0.016	J	0.038	0.0060	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Phenanthrene	0.050		0.038	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1
Pyrene	0.021	J	0.038	0.0077	mg/Kg	☼	05/09/19 18:59	05/10/19 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*61*		*31 - 143*	*05/09/19 18:59*	*05/10/19 16:43*	*1*
2-Fluorobiphenyl	*71*		*43 - 145*	*05/09/19 18:59*	*05/10/19 16:43*	*1*
2-Fluorophenol	*98*		*31 - 166*	*05/09/19 18:59*	*05/10/19 16:43*	*1*
Nitrobenzene-d5	*76*		*37 - 147*	*05/09/19 18:59*	*05/10/19 16:43*	*1*
Phenol-d5	*88*		*30 - 153*	*05/09/19 18:59*	*05/10/19 16:43*	*1*
Terphenyl-d14	*82*		*42 - 157*	*05/09/19 18:59*	*05/10/19 16:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Arsenic	5.2		0.56	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Barium	50		0.56	0.064	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Beryllium	0.70		0.23	0.053	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Boron	17		2.8	0.26	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Cadmium	0.24	B	0.11	0.020	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Calcium	69000	B	56	9.6	mg/Kg	☼	05/09/19 15:52	05/13/19 15:17	5
Chromium	18		0.56	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Cobalt	13		0.28	0.074	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Copper	21	B	0.56	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Iron	17000		11	5.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Lead	19		0.28	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Magnesium	27000		5.6	2.8	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Manganese	400		0.56	0.082	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Nickel	29		0.56	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Potassium	3500		28	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Selenium	1.5	B	0.56	0.33	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Silver	2.8		0.28	0.073	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Sodium	920		56	8.3	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Thallium	0.79		0.56	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Vanadium	22		0.28	0.066	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1
Zinc	53		1.1	0.49	mg/Kg	☼	05/09/19 15:52	05/10/19 16:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 12:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 12:00	1
Manganese	1.8		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 12:00	1

Client Sample ID: 2686V2-4-B04-1

Date Collected: 05/02/19 08:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-7

Matrix: Solid
Percent Solids: 84.1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:41	1
Barium	**0.17**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:41	1
Boron	**0.12**		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:41	1
Calcium	**31**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:41	1
Chromium	**0.050**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:41	1
Cobalt	**0.017**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:41	1
Iron	**33**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:41	1
Lead	**0.022**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:41	1
Manganese	**0.26**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:41	1
Nickel	**0.044**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:41	1
Potassium	**18**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:41	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:41	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:41	1
Zinc	**0.089**	**J B**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:41	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:15	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.018	0.0060	mg/Kg	☼	05/10/19 15:10	05/13/19 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:26	1
pH	**8.8**		0.2	0.2	SU			05/09/19 13:26	1

Client Sample ID: 2686V2-4-B04-2
Date Collected: 05/02/19 08:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-8
Matrix: Solid
Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Acetone	**0.0073**	**J**	0.016	0.0071	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/03/19 17:33*	*05/07/19 12:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/03/19 17:33*	*05/07/19 12:25*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/03/19 17:33*	*05/07/19 12:25*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/03/19 17:33*	*05/07/19 12:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B04-2
Date Collected: 05/02/19 08:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-8
Matrix: Solid
Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Chrysene	**0.014**	**J**	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B04-2

Date Collected: 05/02/19 08:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-8

Matrix: Solid
Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Phenanthrene	**0.016**	**J**	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*05/09/19 18:59*	*05/10/19 17:10*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*05/09/19 18:59*	*05/10/19 17:10*	*1*
2-Fluorophenol	*113*		*31 - 166*	*05/09/19 18:59*	*05/10/19 17:10*	*1*
Nitrobenzene-d5	*89*		*37 - 147*	*05/09/19 18:59*	*05/10/19 17:10*	*1*
Phenol-d5	*103*		*30 - 153*	*05/09/19 18:59*	*05/10/19 17:10*	*1*
Terphenyl-d14	*89*		*42 - 157*	*05/09/19 18:59*	*05/10/19 17:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Arsenic	**5.7**		0.58	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Barium	**53**		0.58	0.066	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Beryllium	**0.73**		0.23	0.054	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Boron	**18**		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Cadmium	**0.21**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Calcium	**73000**	**B**	58	9.8	mg/Kg	☼	05/09/19 15:52	05/13/19 15:21	5
Chromium	**19**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Cobalt	**13**		0.29	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Copper	**20**	**B**	0.58	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Iron	**17000**		12	6.0	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Lead	**10**		0.29	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Magnesium	**29000**		5.8	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Manganese	**380**		0.58	0.084	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Nickel	**32**		0.58	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Potassium	**4100**		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Selenium	**1.1**	**B**	0.58	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Silver	**2.6**		0.29	0.074	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Sodium	**590**		58	8.5	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Thallium	**0.71**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Vanadium	**23**		0.29	0.068	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1
Zinc	**50**		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 16:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 12:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 12:05	1
Manganese	**1.9**		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 12:05	1

Client Sample ID: 2686V2-4-B04-2 Lab Sample ID: 500-162753-8

Date Collected: 05/02/19 08:55 **Matrix: Solid**
Date Received: 05/03/19 12:20 **Percent Solids: 82.1**

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:53	1
Barium	**0.22**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:53	1
Boron	**0.14**		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:53	1
Calcium	**39**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:53	1
Chromium	**0.062**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:53	1
Cobalt	**0.022**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:53	1
Iron	**36**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:53	1
Lead	**0.025**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:53	1
Manganese	**0.37**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:53	1
Nickel	**0.052**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:53	1
Potassium	**22**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:53	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:53	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:53	1
Zinc	**0.47**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:53	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:19	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0063	mg/Kg	☼	05/10/19 15:10	05/13/19 09:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/15/19 10:05	05/15/19 15:26	1
pH	**8.5**		0.2	0.2	SU			05/09/19 13:30	1

Client Sample ID: 2686V2-4-B04-2 Dup

Date Collected: 05/02/19 09:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-9

Matrix: Solid
Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Methylene Chloride	**0.0021**	**J**	0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/03/19 17:33*	*05/07/19 12:50*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/03/19 17:33*	*05/07/19 12:50*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/03/19 17:33*	*05/07/19 12:50*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/03/19 17:33*	*05/07/19 12:50*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1

Client Sample ID: 2686V2-4-B04-2 Dup
Date Collected: 05/02/19 09:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-9
Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2-Methylnaphthalene	**0.015**	**J**	0.078	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Benzo[a]pyrene	**0.028**	**J**	0.039	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.039	0.013	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Chrysene	**0.020**	**J**	0.039	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Fluoranthene	**0.015**	**J**	0.039	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1

Client Sample ID: 2686V2-4-B04-2 Dup

Date Collected: 05/02/19 09:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-9

Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.026**	**J**	0.039	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Phenanthrene	**0.044**		0.039	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1
Pyrene	**0.013**	**J**	0.039	0.0077	mg/Kg	☼	05/09/19 18:59	05/10/19 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*76*		*31 - 143*	*05/09/19 18:59*	*05/10/19 17:36*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*05/09/19 18:59*	*05/10/19 17:36*	*1*
2-Fluorophenol	*113*		*31 - 166*	*05/09/19 18:59*	*05/10/19 17:36*	*1*
Nitrobenzene-d5	*91*		*37 - 147*	*05/09/19 18:59*	*05/10/19 17:36*	*1*
Phenol-d5	*100*		*30 - 153*	*05/09/19 18:59*	*05/10/19 17:36*	*1*
Terphenyl-d14	*92*		*42 - 157*	*05/09/19 18:59*	*05/10/19 17:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Arsenic	**5.9**		0.59	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Barium	**51**		0.59	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Beryllium	**0.66**		0.23	0.055	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Boron	**17**		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Cadmium	**0.23**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Calcium	**74000**	**B**	59	9.9	mg/Kg	☼	05/09/19 15:52	05/13/19 15:25	5
Chromium	**18**		0.59	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Cobalt	**12**		0.29	0.077	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Copper	**20**	**B**	0.59	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Iron	**19000**		12	6.1	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Lead	**12**		0.29	0.14	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Magnesium	**30000**		5.9	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Manganese	**400**		0.59	0.085	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Nickel	**31**		0.59	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Potassium	**3600**		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Selenium	**1.2**	**B**	0.59	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Silver	**2.4**		0.29	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Sodium	**800**		59	8.7	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Thallium	**0.56**	**J**	0.59	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Vanadium	**21**		0.29	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1
Zinc	**52**		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 16:10	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 19:57	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 19:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 19:57	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 19:57	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B04-2 Dup
Date Collected: 05/02/19 09:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-9
Matrix: Solid
Percent Solids: 83.0

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 19:57	1
Calcium	**18**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:57	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:57	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:57	1
Iron	**0.66**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 19:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 19:57	1
Manganese	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:57	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:57	1
Potassium	**1.6**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 19:57	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 19:57	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 19:57	1
Zinc	<0.50		0.50	0.020	mg/L		05/11/19 15:50	05/13/19 19:57	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**	**J**	0.020	0.0066	mg/Kg	☼	05/10/19 15:10	05/13/19 09:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	05/15/19 10:05	05/15/19 15:27	1
pH	**8.4**		0.2	0.2	SU			05/09/19 13:33	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B03
Date Collected: 05/02/19 09:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-10
Matrix: Solid
Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/03/19 17:33*	*05/07/19 13:16*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/03/19 17:33*	*05/07/19 13:16*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/03/19 17:33*	*05/07/19 13:16*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/07/19 13:16*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1

Client Sample ID: 2686V2-4-B03
Date Collected: 05/02/19 09:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-10
Matrix: Solid
Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2-Methylnaphthalene	**0.012**	**J**	0.079	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.039	0.013	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Chrysene	**0.016**	**J**	0.039	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1

Client Sample ID: 2686V2-4-B03
Date Collected: 05/02/19 09:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-10
Matrix: Solid
Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Naphthalene	**0.0066**	**J**	0.039	0.0060	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Phenanthrene	**0.034**	**J**	0.039	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/09/19 18:59	05/10/19 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*31 - 143*	*05/09/19 18:59*	*05/10/19 18:03*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*05/09/19 18:59*	*05/10/19 18:03*	*1*
2-Fluorophenol	*120*		*31 - 166*	*05/09/19 18:59*	*05/10/19 18:03*	*1*
Nitrobenzene-d5	*95*		*37 - 147*	*05/09/19 18:59*	*05/10/19 18:03*	*1*
Phenol-d5	*105*		*30 - 153*	*05/09/19 18:59*	*05/10/19 18:03*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/09/19 18:59*	*05/10/19 18:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Arsenic	**4.9**		0.60	0.21	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Barium	**46**		0.60	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Beryllium	**0.67**		0.24	0.056	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Boron	**17**		3.0	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Cadmium	**0.21**	**B**	0.12	0.022	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Calcium	**72000**	**B**	60	10	mg/Kg	☼	05/09/19 15:52	05/13/19 15:29	5
Chromium	**18**		0.60	0.30	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Cobalt	**13**		0.30	0.079	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Copper	**21**	**B**	0.60	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Iron	**17000**		12	6.3	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Lead	**11**		0.30	0.14	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Magnesium	**30000**		6.0	3.0	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Manganese	**390**		0.60	0.088	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Nickel	**31**		0.60	0.18	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Potassium	**3600**		30	11	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Selenium	**0.87**	**B**	0.60	0.36	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Silver	**2.4**		0.30	0.078	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Sodium	**450**		60	8.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Thallium	**0.53**	**J**	0.60	0.30	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Vanadium	**22**		0.30	0.071	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1
Zinc	**48**		1.2	0.53	mg/Kg	☼	05/09/19 15:52	05/10/19 16:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 12:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 12:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B03
Date Collected: 05/02/19 09:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-10
Matrix: Solid
Percent Solids: 81.8

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:01	1
Barium	**0.087**	**J**	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:01	1
Boron	**0.078**	**J**	0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:01	1
Calcium	**18**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:01	1
Chromium	**0.020**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:01	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:01	1
Iron	**11**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:01	1
Lead	**0.0090**		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:01	1
Manganese	**0.11**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:01	1
Nickel	**0.013**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:01	1
Potassium	**8.9**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:01	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:01	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:01	1
Zinc	**0.10**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:01	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:27	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00024**		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.020	0.0066	mg/Kg	☼	05/10/19 15:10	05/13/19 09:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:27	1
pH	**8.3**		0.2	0.2	SU			05/09/19 13:37	1

Client Sample ID: 2686V2-4-B02
Date Collected: 05/02/19 09:35
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-11
Matrix: Solid
Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/03/19 17:33*	*05/07/19 13:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/03/19 17:33*	*05/07/19 13:41*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/03/19 17:33*	*05/07/19 13:41*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/03/19 17:33*	*05/07/19 13:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1

Client Sample ID: 2686V2-4-B02
Date Collected: 05/02/19 09:35
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-11
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2-Methylnaphthalene	**0.013**	**J**	0.079	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Anthracene	**0.016**	**J**	0.039	0.0066	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Benzo[a]anthracene	**0.036**	**J**	0.039	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Benzo[a]pyrene	**0.051**		0.039	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Benzo[b]fluoranthene	**0.046**		0.039	0.0085	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Benzo[g,h,i]perylene	**0.033**	**J**	0.039	0.013	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Benzo[k]fluoranthene	**0.021**	**J**	0.039	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Chrysene	**0.045**		0.039	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Dibenz(a,h)anthracene	**0.030**	**J**	0.039	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Fluoranthene	**0.086**		0.039	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Fluorene	**0.0078**	**J**	0.039	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B02
Date Collected: 05/02/19 09:35
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-11
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.040**		0.039	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Naphthalene	**0.019**	**J**	0.039	0.0061	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Phenanthrene	**0.085**		0.039	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1
Pyrene	**0.059**		0.039	0.0078	mg/Kg	☼	05/09/19 18:59	05/10/19 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*31 - 143*	*05/09/19 18:59*	*05/10/19 18:30*	*1*
2-Fluorobiphenyl	*91*		*43 - 145*	*05/09/19 18:59*	*05/10/19 18:30*	*1*
2-Fluorophenol	*122*		*31 - 166*	*05/09/19 18:59*	*05/10/19 18:30*	*1*
Nitrobenzene-d5	*98*		*37 - 147*	*05/09/19 18:59*	*05/10/19 18:30*	*1*
Phenol-d5	*107*		*30 - 153*	*05/09/19 18:59*	*05/10/19 18:30*	*1*
Terphenyl-d14	*90*		*42 - 157*	*05/09/19 18:59*	*05/10/19 18:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Arsenic	**5.8**		0.58	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Barium	**45**		0.58	0.066	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Beryllium	**0.67**		0.23	0.054	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Boron	**14**		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Cadmium	**0.26**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Calcium	**57000**	**B**	58	9.8	mg/Kg	☼	05/09/19 15:52	05/13/19 15:33	5
Chromium	**18**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Copper	**22**	**B**	0.58	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Iron	**18000**		12	6.0	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Lead	**13**		0.29	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Magnesium	**24000**		5.8	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Manganese	**380**		0.58	0.084	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Nickel	**36**		0.58	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Potassium	**3300**		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Selenium	**1.2**	**B**	0.58	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Silver	**2.9**		0.29	0.074	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Sodium	**600**		58	8.5	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Thallium	**0.92**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Vanadium	**22**		0.29	0.068	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1
Zinc	**63**		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 16:26	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:05	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:05	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B02
Date Collected: 05/02/19 09:35
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-11
Matrix: Solid
Percent Solids: 84.0

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:05	1
Calcium	**62**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:05	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:05	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:05	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:05	1
Manganese	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:05	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:05	1
Potassium	**1.4**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:05	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:05	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:05	1
Zinc	**0.036**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:05	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:31	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.017	0.0058	mg/Kg	☼	05/10/19 15:10	05/13/19 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:27	1
pH	**8.1**		0.2	0.2	SU			05/09/19 13:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B06
Date Collected: 05/02/19 09:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-12
Matrix: Solid
Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Methylene Chloride	**0.0016**	**J**	0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/03/19 17:33*	*05/07/19 14:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/03/19 17:33*	*05/07/19 14:06*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/03/19 17:33*	*05/07/19 14:06*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/03/19 17:33*	*05/07/19 14:06*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1

Client Sample ID: 2686V2-4-B06
Date Collected: 05/02/19 09:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-12
Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2-Methylnaphthalene	**0.028**	**J**	0.076	0.0069	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Benzo[a]pyrene	**0.016**	**J**	0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Chrysene	**0.040**		0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Fluoranthene	**0.038**		0.038	0.0070	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B06
Date Collected: 05/02/19 09:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-12
Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Naphthalene	**0.0085**	**J**	0.038	0.0058	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Phenanthrene	**0.065**		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1
Pyrene	**0.037**	**J**	0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/14/19 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*114*		*31 - 143*	*05/09/19 18:59*	*05/14/19 19:20*	*1*
2-Fluorobiphenyl	*86*		*43 - 145*	*05/09/19 18:59*	*05/14/19 19:20*	*1*
2-Fluorophenol	*81*		*31 - 166*	*05/09/19 18:59*	*05/14/19 19:20*	*1*
Nitrobenzene-d5	*76*		*37 - 147*	*05/09/19 18:59*	*05/14/19 19:20*	*1*
Phenol-d5	*81*		*30 - 153*	*05/09/19 18:59*	*05/14/19 19:20*	*1*
Terphenyl-d14	*104*		*42 - 157*	*05/09/19 18:59*	*05/14/19 19:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J**	1.2	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Arsenic	**4.9**		0.58	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Barium	**46**		0.58	0.066	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Beryllium	**0.62**		0.23	0.054	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Boron	**16**		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Cadmium	**0.21**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Calcium	**79000**	**B**	58	9.8	mg/Kg	☼	05/09/19 15:52	05/13/19 15:37	5
Chromium	**17**		0.58	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Cobalt	**12**		0.29	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Copper	**19**	**B**	0.58	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Iron	**16000**		12	6.0	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Lead	**11**		0.29	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Magnesium	**32000**		5.8	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Manganese	**390**		0.58	0.083	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Nickel	**29**		0.58	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Potassium	**3400**		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Selenium	**1.1**	**B**	0.58	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Silver	**2.2**		0.29	0.074	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Sodium	**530**		58	8.5	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Thallium	**0.61**		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Vanadium	**20**		0.29	0.068	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1
Zinc	**51**		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 16:30	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:09	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:09	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B06
Date Collected: 05/02/19 09:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-12
Matrix: Solid
Percent Solids: 83.0

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:09	1
Calcium	**21**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:09	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:09	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:09	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:09	1
Manganese	**0.014**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:09	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:09	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:09	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:09	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:09	1
Zinc	**0.11**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:09	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:48	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.018	0.0058	mg/Kg	☼	05/10/19 15:10	05/13/19 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	05/15/19 10:05	05/15/19 15:28	1
pH	**8.4**		0.2	0.2	SU			05/09/19 13:45	1

Client Sample ID: 2686V2-4-B05
Date Collected: 05/02/19 09:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-13
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/03/19 17:33*	*05/07/19 14:32*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/03/19 17:33*	*05/07/19 14:32*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/03/19 17:33*	*05/07/19 14:32*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/03/19 17:33*	*05/07/19 14:32*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1

Client Sample ID: 2686V2-4-B05
Date Collected: 05/02/19 09:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-13
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2-Methylnaphthalene	**0.013**	**J**	0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Benzo[g,h,i]perylene	**0.015**	**J**	0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Chrysene	**0.020**	**J**	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B05
Date Collected: 05/02/19 09:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-13
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Phenanthrene	**0.030**	**J**	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1
Pyrene	**0.0091**	**J**	0.038	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*31 - 143*	*05/09/19 18:59*	*05/10/19 18:57*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*05/09/19 18:59*	*05/10/19 18:57*	*1*
2-Fluorophenol	*109*		*31 - 166*	*05/09/19 18:59*	*05/10/19 18:57*	*1*
Nitrobenzene-d5	*85*		*37 - 147*	*05/09/19 18:59*	*05/10/19 18:57*	*1*
Phenol-d5	*96*		*30 - 153*	*05/09/19 18:59*	*05/10/19 18:57*	*1*
Terphenyl-d14	*84*		*42 - 157*	*05/09/19 18:59*	*05/10/19 18:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	**J**	1.1	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Arsenic	**6.5**		0.57	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Barium	**45**		0.57	0.065	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Beryllium	**0.58**		0.23	0.053	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Boron	**16**		2.8	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Cadmium	**0.28**	**B**	0.11	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Calcium	**80000**	**B**	57	9.7	mg/Kg	☼	05/09/19 15:52	05/13/19 15:41	5
Chromium	**16**		0.57	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Cobalt	**12**		0.28	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Copper	**20**	**B**	0.57	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Iron	**16000**		11	5.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Lead	**10**		0.28	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Magnesium	**33000**		5.7	2.8	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Manganese	**450**		0.57	0.083	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Nickel	**29**		0.57	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Potassium	**3300**		28	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Selenium	**1.1**	**B**	0.57	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Silver	**2.2**		0.28	0.074	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Sodium	**300**		57	8.4	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Thallium	**0.53**	**J**	0.57	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Vanadium	**20**		0.28	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1
Zinc	**71**		1.1	0.50	mg/Kg	☼	05/09/19 15:52	05/10/19 16:34	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:13	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:13	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:13	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B05
Date Collected: 05/02/19 09:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-13
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:13	1
Calcium	**130**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:13	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:13	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:13	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:13	1
Manganese	**0.049**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:13	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:13	1
Potassium	**1.7**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:13	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:13	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:13	1
Zinc	**0.046**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:13	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:52	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 08:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.019	0.0063	mg/Kg	☼	05/13/19 14:40	05/14/19 08:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/15/19 10:05	05/15/19 15:28	1
pH	**8.0**		0.2	0.2	SU			05/09/19 13:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B10-1
Date Collected: 05/02/19 11:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-14
Matrix: Solid
Percent Solids: 85.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Acetone	**0.015**	**J**	0.016	0.0068	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Methylene Chloride	**0.0019**	**J**	0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/03/19 17:33*	*05/07/19 14:58*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/03/19 17:33*	*05/07/19 14:58*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/03/19 17:33*	*05/07/19 14:58*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/03/19 17:33*	*05/07/19 14:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1

Client Sample ID: 2686V2-4-B10-1
Date Collected: 05/02/19 11:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-14
Matrix: Solid
Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Chrysene	**0.018**	**J**	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B10-1
Date Collected: 05/02/19 11:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-14
Matrix: Solid
Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Phenanthrene	**0.024**	**J**	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1
Pyrene	**0.0088**	**J**	0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*05/09/19 18:59*	*05/10/19 19:24*	*1*
2-Fluorobiphenyl	*87*		*43 - 145*	*05/09/19 18:59*	*05/10/19 19:24*	*1*
2-Fluorophenol	*111*		*31 - 166*	*05/09/19 18:59*	*05/10/19 19:24*	*1*
Nitrobenzene-d5	*89*		*37 - 147*	*05/09/19 18:59*	*05/10/19 19:24*	*1*
Phenol-d5	*98*		*30 - 153*	*05/09/19 18:59*	*05/10/19 19:24*	*1*
Terphenyl-d14	*90*		*42 - 157*	*05/09/19 18:59*	*05/10/19 19:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.24**	**J**	1.1	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Arsenic	**5.6**		0.56	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Barium	**46**		0.56	0.063	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Beryllium	**0.60**		0.22	0.052	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Boron	**14**		2.8	0.26	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Cadmium	**0.26**	**B**	0.11	0.020	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Calcium	**77000**	**B**	56	9.4	mg/Kg	☼	05/09/19 15:52	05/13/19 15:45	5
Chromium	**16**		0.56	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Cobalt	**17**		0.28	0.073	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Copper	**21**	**B**	0.56	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Iron	**17000**		11	5.8	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Lead	**13**		0.28	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Magnesium	**29000**		5.6	2.8	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Manganese	**420**		0.56	0.081	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Nickel	**34**		0.56	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Potassium	**3200**		28	9.8	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Selenium	**1.1**	**B**	0.56	0.33	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Silver	**2.3**		0.28	0.072	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Sodium	**420**		56	8.2	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Thallium	**0.57**		0.56	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Vanadium	**20**		0.28	0.066	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1
Zinc	**56**		1.1	0.49	mg/Kg	☼	05/09/19 15:52	05/10/19 16:38	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:18	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:18	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B10-1
Date Collected: 05/02/19 11:00
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-14
Matrix: Solid
Percent Solids: 85.1

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:18	1
Calcium	**68**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:18	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:18	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:18	1
Manganese	**0.038**		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:18	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:18	1
Potassium	**1.4**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:18	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:18	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:18	1
Zinc	**0.53**	**B**	0.50	0.020	mg/L		05/11/19 15:50	05/14/19 13:13	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 21:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 21:57	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 09:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.019	0.0063	mg/Kg	☼	05/13/19 14:40	05/14/19 08:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	05/15/19 10:05	05/15/19 15:28	1
pH	**7.9**		0.2	0.2	SU			05/09/19 13:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B10-2
Date Collected: 05/02/19 11:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-15
Matrix: Solid
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Acetone	**0.0072**	**J**	0.016	0.0068	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/03/19 17:33*	*05/07/19 15:23*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/03/19 17:33*	*05/07/19 15:23*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/03/19 17:33*	*05/07/19 15:23*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/03/19 17:33*	*05/07/19 15:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1

Client Sample ID: 2686V2-4-B10-2
Date Collected: 05/02/19 11:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-15
Matrix: Solid
Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1

Client Sample ID: 2686V2-4-B10-2
Date Collected: 05/02/19 11:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-15
Matrix: Solid
Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Phenanthrene	**0.018**	**J**	0.039	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/09/19 18:59	05/10/19 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*31 - 143*	*05/09/19 18:59*	*05/10/19 19:51*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*05/09/19 18:59*	*05/10/19 19:51*	*1*
2-Fluorophenol	*112*		*31 - 166*	*05/09/19 18:59*	*05/10/19 19:51*	*1*
Nitrobenzene-d5	*90*		*37 - 147*	*05/09/19 18:59*	*05/10/19 19:51*	*1*
Phenol-d5	*100*		*30 - 153*	*05/09/19 18:59*	*05/10/19 19:51*	*1*
Terphenyl-d14	*90*		*42 - 157*	*05/09/19 18:59*	*05/10/19 19:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.25**	**J**	1.2	0.23	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Arsenic	**4.7**		0.60	0.21	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Barium	**45**		0.60	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Beryllium	**0.66**		0.24	0.056	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Boron	**17**		3.0	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Cadmium	**0.22**	**B**	0.12	0.022	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Calcium	**74000**	**B**	60	10	mg/Kg	☼	05/09/19 15:52	05/13/19 15:49	5
Chromium	**17**		0.60	0.30	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Cobalt	**12**		0.30	0.079	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Copper	**19**	**B**	0.60	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Iron	**16000**		12	6.3	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Lead	**10**		0.30	0.14	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Magnesium	**30000**		6.0	3.0	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Manganese	**390**		0.60	0.087	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Nickel	**29**		0.60	0.18	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Potassium	**3700**		30	11	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Selenium	**0.98**	**B**	0.60	0.35	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Silver	**2.4**		0.30	0.078	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Sodium	**260**		60	8.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Thallium	**0.55**	**J**	0.60	0.30	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Vanadium	**22**		0.30	0.071	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1
Zinc	**52**		1.2	0.53	mg/Kg	☼	05/09/19 15:52	05/10/19 16:42	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:22	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:22	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B10-2
Date Collected: 05/02/19 11:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-15
Matrix: Solid
Percent Solids: 82.4

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:22	1
Calcium	**13**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:22	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:22	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:22	1
Iron	**0.92**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:22	1
Manganese	**0.011**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:22	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:22	1
Potassium	**2.1**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:22	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:22	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:22	1
Zinc	<0.50		0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:22	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 22:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 22:01	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 09:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**	**J**	0.020	0.0065	mg/Kg	☼	05/13/19 14:40	05/14/19 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	05/15/19 10:05	05/15/19 15:29	1
pH	**8.5**		0.2	0.2	SU			05/09/19 13:56	1

Client Sample ID: 2686V2-4-B10-2 Dup

Date Collected: 05/02/19 11:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-16

Matrix: Solid
Percent Solids: 86.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Acetone	**0.0092**	**J**	0.015	0.0065	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/03/19 17:33*	*05/07/19 17:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/03/19 17:33*	*05/07/19 17:29*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/03/19 17:33*	*05/07/19 17:29*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/03/19 17:33*	*05/07/19 17:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1

Client Sample ID: 2686V2-4-B10-2 Dup
Date Collected: 05/02/19 11:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-16
Matrix: Solid
Percent Solids: 86.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2-Methylnaphthalene	**0.062**	**J**	0.075	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Benzo[g,h,i]perylene	**0.012**	**J**	0.037	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Chrysene	**0.015**	**J**	0.037	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1

Client Sample ID: 2686V2-4-B10-2 Dup
Date Collected: 05/02/19 11:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-16
Matrix: Solid
Percent Solids: 86.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Phenanthrene	**0.051**		0.037	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*31 - 143*	*05/09/19 18:59*	*05/10/19 20:17*	*1*
2-Fluorobiphenyl	*83*		*43 - 145*	*05/09/19 18:59*	*05/10/19 20:17*	*1*
2-Fluorophenol	*105*		*31 - 166*	*05/09/19 18:59*	*05/10/19 20:17*	*1*
Nitrobenzene-d5	*90*		*37 - 147*	*05/09/19 18:59*	*05/10/19 20:17*	*1*
Phenol-d5	*95*		*30 - 153*	*05/09/19 18:59*	*05/10/19 20:17*	*1*
Terphenyl-d14	*83*		*42 - 157*	*05/09/19 18:59*	*05/10/19 20:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.27**	**J**	1.1	0.21	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Arsenic	**8.5**		0.55	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Barium	**24**		0.55	0.062	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Beryllium	**0.48**		0.22	0.051	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Boron	**13**		2.7	0.25	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Cadmium	**0.28**	**B**	0.11	0.020	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Calcium	**82000**	**B**	55	9.3	mg/Kg	☼	05/09/19 15:52	05/13/19 15:53	5
Chromium	**12**		0.55	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Cobalt	**12**		0.27	0.072	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Copper	**24**	**B**	0.55	0.15	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Iron	**15000**		11	5.7	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Magnesium	**29000**		5.5	2.7	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Manganese	**440**		0.55	0.079	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Nickel	**29**		0.55	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Potassium	**2600**		27	9.7	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Selenium	**0.95**	**B**	0.55	0.32	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Silver	**2.2**		0.27	0.071	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Sodium	**220**		55	8.1	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Thallium	**0.80**		0.55	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Vanadium	**15**		0.27	0.065	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1
Zinc	**51**		1.1	0.48	mg/Kg	☼	05/09/19 15:52	05/10/19 16:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:26	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:26	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B10-2 Dup
Date Collected: 05/02/19 11:10
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-16
Matrix: Solid
Percent Solids: 86.3

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:26	1
Calcium	**14**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:26	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:26	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:26	1
Iron	**0.52**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:26	1
Manganese	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:26	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:26	1
Potassium	**1.9**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:26	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:26	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:26	1
Zinc	**0.25**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:26	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 22:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 22:05	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 09:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0063	mg/Kg	☼	05/13/19 14:40	05/14/19 08:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	05/15/19 10:05	05/15/19 15:29	1
pH	**8.3**		0.2	0.2	SU			05/09/19 14:00	1

Client Sample ID: 2686V2-4-B11
Date Collected: 05/02/19 11:20
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-17
Matrix: Solid
Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/03/19 17:33*	*05/07/19 17:54*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 131*	*05/03/19 17:33*	*05/07/19 17:54*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/03/19 17:33*	*05/07/19 17:54*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/03/19 17:33*	*05/07/19 17:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1

Client Sample ID: 2686V2-4-B11
Date Collected: 05/02/19 11:20
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-17
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2-Methylnaphthalene	**0.0089**	**J**	0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Benzo[g,h,i]perylene	**0.012**	**J**	0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Chrysene	**0.017**	**J**	0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B11
Date Collected: 05/02/19 11:20
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-17
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Phenanthrene	**0.029**	**J**	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/09/19 18:59	05/10/19 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*05/09/19 18:59*	*05/10/19 20:44*	*1*
2-Fluorobiphenyl	*77*		*43 - 145*	*05/09/19 18:59*	*05/10/19 20:44*	*1*
2-Fluorophenol	*102*		*31 - 166*	*05/09/19 18:59*	*05/10/19 20:44*	*1*
Nitrobenzene-d5	*82*		*37 - 147*	*05/09/19 18:59*	*05/10/19 20:44*	*1*
Phenol-d5	*93*		*30 - 153*	*05/09/19 18:59*	*05/10/19 20:44*	*1*
Terphenyl-d14	*83*		*42 - 157*	*05/09/19 18:59*	*05/10/19 20:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Arsenic	**5.7**		0.57	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Barium	**45**		0.57	0.065	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Beryllium	**0.64**		0.23	0.053	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Cadmium	**0.25**	**B**	0.11	0.020	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Calcium	**78000**	**B**	57	9.6	mg/Kg	☼	05/09/19 15:52	05/13/19 16:05	5
Chromium	**17**		0.57	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Cobalt	**12**		0.28	0.074	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Copper	**22**	**B**	0.57	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Iron	**17000**		11	5.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Magnesium	**30000**		5.7	2.8	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Manganese	**390**		0.57	0.082	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Nickel	**32**		0.57	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Potassium	**3500**		28	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Selenium	**0.92**	**B**	0.57	0.33	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Silver	**2.4**		0.28	0.073	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Sodium	**810**		57	8.4	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Thallium	**0.84**		0.57	0.28	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Vanadium	**21**		0.28	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1
Zinc	**50**		1.1	0.50	mg/Kg	☼	05/09/19 15:52	05/10/19 16:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:55	05/13/19 12:50	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 12:50	1
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:55	05/13/19 12:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:55	05/13/19 12:50	1

Client Sample ID: 2686V2-4-B11
Date Collected: 05/02/19 11:20
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-17
Matrix: Solid
Percent Solids: 84.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.9		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 12:50	1
Nickel	0.054		0.025	0.010	mg/L		05/11/19 15:55	05/13/19 12:50	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.029	J	0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:30	1
Barium	0.48	J	0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:30	1
Beryllium	0.0070		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:30	1
Boron	0.26		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:30	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:30	1
Calcium	87		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:30	1
Chromium	0.17		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:30	1
Cobalt	0.077		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:30	1
Iron	110		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:30	1
Lead	0.077		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:30	1
Manganese	0.98		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:30	1
Nickel	0.19		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:30	1
Potassium	46		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:30	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:30	1
Silver	0.011	J	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:30	1
Zinc	0.28	J B ^	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:55	05/15/19 18:06	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 22:09	1
Thallium	0.0028		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 22:09	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/14/19 10:25	05/15/19 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0062	mg/Kg	☼	05/13/19 14:40	05/14/19 08:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/15/19 10:05	05/15/19 15:30	1
pH	8.9		0.2	0.2	SU			05/09/19 14:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B07
Date Collected: 05/02/19 12:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-18
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Acetone	**0.015**	**J**	0.016	0.0069	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/03/19 17:33*	*05/07/19 18:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/03/19 17:33*	*05/07/19 18:20*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/03/19 17:33*	*05/07/19 18:20*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/03/19 17:33*	*05/07/19 18:20*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B07
Date Collected: 05/02/19 12:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-18
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2-Methylnaphthalene	**0.016**	**J**	0.075	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Benzo[a]pyrene	**0.026**	**J**	0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Benzo[g,h,i]perylene	**0.015**	**J**	0.037	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1

Client Sample ID: 2686V2-4-B07
Date Collected: 05/02/19 12:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-18
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.025**	**J**	0.037	0.0097	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Phenanthrene	**0.031**	**J**	0.037	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1
Pyrene	**0.010**	**J**	0.037	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*05/09/19 18:59*	*05/10/19 21:11*	*1*
2-Fluorobiphenyl	*91*		*43 - 145*	*05/09/19 18:59*	*05/10/19 21:11*	*1*
2-Fluorophenol	*119*		*31 - 166*	*05/09/19 18:59*	*05/10/19 21:11*	*1*
Nitrobenzene-d5	*99*		*37 - 147*	*05/09/19 18:59*	*05/10/19 21:11*	*1*
Phenol-d5	*109*		*30 - 153*	*05/09/19 18:59*	*05/10/19 21:11*	*1*
Terphenyl-d14	*103*		*42 - 157*	*05/09/19 18:59*	*05/10/19 21:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.34**	**J**	1.2	0.23	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Arsenic	**5.9**		0.59	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Barium	**39**		0.59	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Beryllium	**0.60**		0.24	0.055	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Boron	**15**		3.0	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Cadmium	**0.21**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Calcium	**77000**	**B**	59	10	mg/Kg	☼	05/09/19 15:52	05/13/19 16:09	5
Chromium	**16**		0.59	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Cobalt	**12**		0.30	0.077	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Copper	**21**	**B**	0.59	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Iron	**16000**		12	6.1	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Lead	**11**		0.30	0.14	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Magnesium	**31000**		5.9	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Manganese	**390**		0.59	0.086	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Nickel	**28**		0.59	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Potassium	**3300**		30	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Selenium	**0.94**	**B**	0.59	0.35	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Silver	**2.2**		0.30	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Sodium	**260**		59	8.7	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Thallium	**0.60**		0.59	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Vanadium	**20**		0.30	0.070	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1
Zinc	**47**		1.2	0.52	mg/Kg	☼	05/09/19 15:52	05/10/19 16:55	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:42	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:42	1
Boron	**0.052**	**J**	0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:42	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B07
Date Collected: 05/02/19 12:05
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-18
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:42	1
Calcium	**15**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:42	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:42	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:42	1
Iron	**0.41**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:42	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:42	1
Manganese	**0.013**	**J**	0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:42	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:42	1
Potassium	**1.7**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:42	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:42	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:42	1
Zinc	**0.14**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:42	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 22:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 22:13	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 09:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.019	0.0064	mg/Kg	☼	05/13/19 14:40	05/14/19 08:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/15/19 10:05	05/15/19 15:31	1
pH	**8.3**		0.2	0.2	SU			05/09/19 14:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B08-1
Date Collected: 05/02/19 12:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-19
Matrix: Solid
Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Acetone	**0.0065**	**J**	0.015	0.0064	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Chloroethane	<0.0036	*	0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*05/03/19 17:33*	*05/07/19 18:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/03/19 17:33*	*05/07/19 18:45*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/03/19 17:33*	*05/07/19 18:45*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/03/19 17:33*	*05/07/19 18:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1

Client Sample ID: 2686V2-4-B08-1
Date Collected: 05/02/19 12:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-19
Matrix: Solid
Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2-Methylnaphthalene	**0.018**	**J**	0.077	0.0070	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Acenaphthylene	**0.011**	**J**	0.038	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Anthracene	**0.010**	**J**	0.038	0.0064	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Benzo[a]anthracene	**0.032**	**J**	0.038	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Benzo[a]pyrene	**0.070**		0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Benzo[b]fluoranthene	**0.067**		0.038	0.0083	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Benzo[g,h,i]perylene	**0.050**		0.038	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Benzo[k]fluoranthene	**0.030**	**J**	0.038	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Chrysene	**0.041**		0.038	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Dibenz(a,h)anthracene	**0.033**	**J**	0.038	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Fluoranthene	**0.044**		0.038	0.0071	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1

Client Sample ID: 2686V2-4-B08-1
Date Collected: 05/02/19 12:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-19
Matrix: Solid
Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.054		0.038	0.0099	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Phenanthrene	0.029	J	0.038	0.0053	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1
Pyrene	0.051		0.038	0.0076	mg/Kg	☼	05/09/19 18:59	05/10/19 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*66*		*31 - 143*	*05/09/19 18:59*	*05/10/19 21:38*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*05/09/19 18:59*	*05/10/19 21:38*	*1*
2-Fluorophenol	*111*		*31 - 166*	*05/09/19 18:59*	*05/10/19 21:38*	*1*
Nitrobenzene-d5	*88*		*37 - 147*	*05/09/19 18:59*	*05/10/19 21:38*	*1*
Phenol-d5	*100*		*30 - 153*	*05/09/19 18:59*	*05/10/19 21:38*	*1*
Terphenyl-d14	*88*		*42 - 157*	*05/09/19 18:59*	*05/10/19 21:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.2	0.23	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Arsenic	5.6		0.58	0.20	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Barium	43		0.58	0.067	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Beryllium	0.64		0.23	0.054	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Boron	17		2.9	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Cadmium	0.23	B	0.12	0.021	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Calcium	77000	B	58	9.9	mg/Kg	☼	05/09/19 15:52	05/13/19 16:13	5
Chromium	17		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Cobalt	12		0.29	0.076	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Copper	20	B	0.58	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Iron	16000		12	6.1	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Lead	11		0.29	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Magnesium	31000		5.8	2.9	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Manganese	380		0.58	0.085	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Nickel	29		0.58	0.17	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Potassium	3600		29	10	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Selenium	0.81	B	0.58	0.34	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Silver	2.4		0.29	0.075	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Sodium	240		58	8.6	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Thallium	0.71		0.58	0.29	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Vanadium	21		0.29	0.069	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1
Zinc	47		1.2	0.51	mg/Kg	☼	05/09/19 15:52	05/10/19 16:59	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:46	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:46	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B08-1
Date Collected: 05/02/19 12:25
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-19
Matrix: Solid
Percent Solids: 85.0

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:46	1
Calcium	**14**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:46	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:46	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:46	1
Iron	**0.55**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:46	1
Manganese	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:46	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:46	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:46	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:46	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:46	1
Zinc	<0.50		0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:46	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 22:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 22:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 09:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.018	0.0060	mg/Kg	☼	05/13/19 14:40	05/14/19 08:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/15/19 10:05	05/15/19 15:31	1
pH	**8.4**		0.2	0.2	SU			05/09/19 14:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B08-2
Date Collected: 05/02/19 12:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-20
Matrix: Solid
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Chloroethane	<0.0036	*	0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/03/19 17:33	05/07/19 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/03/19 17:33*	*05/07/19 19:10*	*1*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/03/19 17:33*	*05/07/19 19:10*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/03/19 17:33*	*05/07/19 19:10*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/07/19 19:10*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1

Client Sample ID: 2686V2-4-B08-2
Date Collected: 05/02/19 12:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-20
Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2-Methylnaphthalene	**0.038**	**J**	0.075	0.0068	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Bis(2-ethylhexyl) phthalate	**0.077**	**J**	0.19	0.068	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Chrysene	**0.018**	**J**	0.037	0.010	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B08-2
Date Collected: 05/02/19 12:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-20
Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Naphthalene	**0.0075**	**J**	0.037	0.0057	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Phenanthrene	**0.039**		0.037	0.0052	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/09/19 18:59	05/10/19 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*70*		*31 - 143*	*05/09/19 18:59*	*05/10/19 22:05*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*05/09/19 18:59*	*05/10/19 22:05*	*1*
2-Fluorophenol	*109*		*31 - 166*	*05/09/19 18:59*	*05/10/19 22:05*	*1*
Nitrobenzene-d5	*90*		*37 - 147*	*05/09/19 18:59*	*05/10/19 22:05*	*1*
Phenol-d5	*97*		*30 - 153*	*05/09/19 18:59*	*05/10/19 22:05*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/09/19 18:59*	*05/10/19 22:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Arsenic	**5.4**		0.55	0.19	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Barium	**44**		0.55	0.062	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Beryllium	**0.62**		0.22	0.051	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Boron	**17**		2.7	0.25	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Cadmium	**0.21**	**B**	0.11	0.020	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Calcium	**78000**	**B**	55	9.3	mg/Kg	☼	05/09/19 15:52	05/13/19 16:17	5
Chromium	**17**		0.55	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Cobalt	**12**		0.27	0.072	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Copper	**21**	**B**	0.55	0.15	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Iron	**16000**		11	5.7	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Lead	**10**		0.27	0.13	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Magnesium	**31000**		5.5	2.7	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Manganese	**410**		0.55	0.079	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Nickel	**29**		0.55	0.16	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Potassium	**3500**		27	9.7	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Selenium	**0.88**	**B**	0.55	0.32	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Silver	**2.2**		0.27	0.070	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Sodium	**220**		55	8.1	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Thallium	**0.59**		0.55	0.27	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Vanadium	**20**		0.27	0.064	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1
Zinc	**48**		1.1	0.48	mg/Kg	☼	05/09/19 15:52	05/10/19 17:03	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:50	05/13/19 20:50	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:50	05/13/19 20:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:50	05/13/19 20:50	1
Boron	**0.065**	**J**	0.10	0.050	mg/L		05/11/19 15:50	05/13/19 20:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B08-2
Date Collected: 05/02/19 12:30
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-20
Matrix: Solid
Percent Solids: 84.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:50	05/13/19 20:50	1
Calcium	**12**		2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:50	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:50	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:50	1
Iron	**0.99**		0.40	0.20	mg/L		05/11/19 15:50	05/13/19 20:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:50	05/13/19 20:50	1
Manganese	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:50	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:50	1
Potassium	**2.0**	**J**	2.5	0.50	mg/L		05/11/19 15:50	05/13/19 20:50	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:50	05/13/19 20:50	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:50	05/13/19 20:50	1
Zinc	**0.023**	**J B ^**	0.50	0.020	mg/L		05/11/19 15:50	05/13/19 20:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:50	05/13/19 22:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:50	05/13/19 22:30	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/19 10:25	05/15/19 09:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.018	0.0061	mg/Kg	☼	05/13/19 14:40	05/14/19 08:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/15/19 10:05	05/15/19 15:31	1
pH	**8.6**		0.2	0.2	SU			05/09/19 14:15	1

Client Sample ID: 2686V2-4-B09-1
Date Collected: 05/02/19 12:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-21
Matrix: Solid
Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Acetone	<0.014		0.014	0.0062	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Carbon disulfide	<0.0035		0.0035	0.00074	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	05/03/19 17:33	05/08/19 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/03/19 17:33*	*05/08/19 17:01*	*1*
4-Bromofluorobenzene (Surr)	*98*		*75 - 131*	*05/03/19 17:33*	*05/08/19 17:01*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/03/19 17:33*	*05/08/19 17:01*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/03/19 17:33*	*05/08/19 17:01*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1

Client Sample ID: 2686V2-4-B09-1
Date Collected: 05/02/19 12:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-21
Matrix: Solid
Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2-Methylnaphthalene	**0.0085**	**J**	0.076	0.0070	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Benzo[b]fluoranthene	**0.011**	**J**	0.038	0.0082	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Benzo[g,h,i]perylene	**0.017**	**J**	0.038	0.012	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Chrysene	**0.024**	**J**	0.038	0.010	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Fluoranthene	**0.011**	**J**	0.038	0.0070	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B09-1
Date Collected: 05/02/19 12:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-21
Matrix: Solid
Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Phenanthrene	**0.034**	**J**	0.038	0.0053	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1
Pyrene	**0.016**	**J**	0.038	0.0075	mg/Kg	☼	05/10/19 17:21	05/13/19 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*74*		*31 - 143*	*05/10/19 17:21*	*05/13/19 14:22*	*1*
2-Fluorobiphenyl	*84*		*43 - 145*	*05/10/19 17:21*	*05/13/19 14:22*	*1*
2-Fluorophenol	*91*		*31 - 166*	*05/10/19 17:21*	*05/13/19 14:22*	*1*
Nitrobenzene-d5	*80*		*37 - 147*	*05/10/19 17:21*	*05/13/19 14:22*	*1*
Phenol-d5	*95*		*30 - 153*	*05/10/19 17:21*	*05/13/19 14:22*	*1*
Terphenyl-d14	*98*		*42 - 157*	*05/10/19 17:21*	*05/13/19 14:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Arsenic	**5.4**		0.54	0.18	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Barium	**30**		0.54	0.062	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Beryllium	**0.52**		0.22	0.051	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Boron	**12**		2.7	0.25	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Cadmium	**0.19**	**B**	0.11	0.019	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Calcium	**87000**	**B**	54	9.2	mg/Kg	☼	05/09/19 15:55	05/13/19 22:54	5
Chromium	**12**		0.54	0.27	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Cobalt	**11**		0.27	0.071	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Copper	**20**		0.54	0.15	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Iron	**17000**		11	5.6	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Lead	**11**		0.27	0.12	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Magnesium	**46000**		27	13	mg/Kg	☼	05/09/19 15:55	05/13/19 22:54	5
Manganese	**670**		0.54	0.078	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Nickel	**26**		0.54	0.16	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Potassium	**2500**		27	9.6	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Selenium	**1.0**		0.54	0.32	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Silver	**2.0**		0.27	0.070	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Sodium	**230**		54	8.0	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Thallium	**0.41**	**J**	0.54	0.27	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Vanadium	**16**		0.27	0.064	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1
Zinc	**43**		1.1	0.47	mg/Kg	☼	05/09/19 15:55	05/10/19 13:50	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:16	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:16	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:16	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B09-1
Date Collected: 05/02/19 12:50
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-21
Matrix: Solid
Percent Solids: 85.0

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:16	1
Calcium	**15**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:16	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:16	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:16	1
Iron	**0.61**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:16	1
Manganese	**0.016**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:16	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:16	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:16	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:16	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:16	1
Zinc	**0.021**	**J ^**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:16	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 18:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 18:53	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/13/19 10:35	05/14/19 08:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0062	mg/Kg	☼	05/13/19 14:40	05/14/19 08:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/13/19 13:30	05/13/19 16:08	1
pH	**8.3**		0.2	0.2	SU			05/09/19 14:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B09-2
Date Collected: 05/02/19 12:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-22
Matrix: Solid
Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/03/19 17:33	05/08/19 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/03/19 17:33*	*05/08/19 17:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/03/19 17:33*	*05/08/19 17:27*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/03/19 17:33*	*05/08/19 17:27*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/03/19 17:33*	*05/08/19 17:27*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1

Client Sample ID: 2686V2-4-B09-2
Date Collected: 05/02/19 12:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-22
Matrix: Solid
Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Chrysene	**0.018**	**J**	0.038	0.010	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Fluoranthene	**0.0077**	**J**	0.038	0.0070	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B09-2
Date Collected: 05/02/19 12:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-22
Matrix: Solid
Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Phenanthrene	**0.015**	**J**	0.038	0.0053	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1
Pyrene	**0.012**	**J**	0.038	0.0075	mg/Kg	☼	05/10/19 17:21	05/13/19 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*31 - 143*	*05/10/19 17:21*	*05/13/19 14:45*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*05/10/19 17:21*	*05/13/19 14:45*	*1*
2-Fluorophenol	*85*		*31 - 166*	*05/10/19 17:21*	*05/13/19 14:45*	*1*
Nitrobenzene-d5	*72*		*37 - 147*	*05/10/19 17:21*	*05/13/19 14:45*	*1*
Phenol-d5	*86*		*30 - 153*	*05/10/19 17:21*	*05/13/19 14:45*	*1*
Terphenyl-d14	*88*		*42 - 157*	*05/10/19 17:21*	*05/13/19 14:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J**	1.2	0.23	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Arsenic	**6.8**		0.58	0.20	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Barium	**23**		0.58	0.066	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Beryllium	**0.44**		0.23	0.054	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Boron	**12**		2.9	0.27	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Cadmium	**0.25**	**B**	0.12	0.021	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Calcium	**81000**	**B**	58	9.8	mg/Kg	☼	05/09/19 15:55	05/13/19 22:58	5
Chromium	**11**		0.58	0.29	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Cobalt	**11**		0.29	0.076	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Copper	**23**		0.58	0.16	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Iron	**15000**		12	6.0	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Lead	**11**		0.29	0.13	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Magnesium	**44000**		29	14	mg/Kg	☼	05/09/19 15:55	05/13/19 22:58	5
Manganese	**510**		0.58	0.084	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Nickel	**26**		0.58	0.17	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Potassium	**2300**		29	10	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Selenium	**1.1**		0.58	0.34	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Silver	**1.8**		0.29	0.075	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Sodium	**220**		58	8.6	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Thallium	**0.48**	**J**	0.58	0.29	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Vanadium	**15**		0.29	0.068	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1
Zinc	**43**		1.2	0.51	mg/Kg	☼	05/09/19 15:55	05/10/19 13:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:20	1
Barium	<0.50		0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:20	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Client Sample ID: 2686V2-4-B09-2
Date Collected: 05/02/19 12:55
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-22
Matrix: Solid
Percent Solids: 83.7

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:20	1
Calcium	**15**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:20	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:20	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:20	1
Iron	**0.39**	**J**	0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:20	1
Manganese	**0.011**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:20	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:20	1
Potassium	**1.4**	**J**	2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:20	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:20	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:20	1
Zinc	**0.19**	**J ^**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:20	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 18:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 18:58	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/13/19 10:35	05/14/19 08:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0065	mg/Kg	☼	05/13/19 14:40	05/14/19 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.17	mg/Kg	☼	05/13/19 13:30	05/13/19 16:08	1
pH	**8.1**		0.2	0.2	SU			05/09/19 14:26	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-3

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	Project Name:	COC No.:
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project No.: PTB 184-006/AE7-018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: WILL OLEWILER	____ of ____ Lab Job No.: 500-162753 Sample Temp:

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
7	2686V2-4-B04-1	5-2-19	0850	S	X	X					X	X	X	X	X					
8	2686V2-4-B04-2		0855																	
9	2686V2-4-B04-2 DUP		0900																	
10	2686V2-4-B03		0910																	
11	2686V2-4-B02		0935																	
12	2686V2-4-B06		0950																	
13	2686V2-4-B05		0955																	
14	2686V2-4-B10-1		1100																	
15	2686V2-4-B10-2		1105																	
16	2686V2-4-B10-2 DUP		1110																	
17	2686V2-4-B11		1120																	

Relinquished by:	Date/Time	Received by:	Date/Time
	5/2/19 945	TA 5/3/19 945	
TA 5/3/19	1220	TA-CHI	5/3/19 1220

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory		COC No.:
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: ~~[illegible]~~ Project No.: PTB 184-006 / AE7-018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: G. Gill, C. Grey	____ of ____ Lab Job No.: 500-162753 Sample Temp:

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
18	2686V2-4-B07	5-2-19	1205	S	X	X					X	X	X	X	X					
19	2686V2-4-B08-1	↓	1225	↓	↓	↓					↓	↓	↓	↓	↓					
20	2686V2-4-B08-2		1230																	
21	2686V2-4-B09-1		1250																	
22	2686V2-4-B09-2		1255																	
	~~2686V2-4-B~~																			

Relinquished by:	Date/Time 5/2/19 9:25	Received by: TA 5/2/19	Date/Time
Relinquished by: TA 5/3/19	Date/Time 1720	Received by: TA-CHT	Date/Time 5/3/19 1220
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):
600 block of W. Deerpath Rd. (south side of Deerpath Rd beneath US 41; SB ramp stat. 349+50 RT, NB ramp stat. 449+50 LT)

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24738 (Decimal Degrees) Longitude: -87.86138 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 308

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24738 Longitude: - 87.86138

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-6-B01 THROUGH 2686V2-6-B03 WERE SAMPLED ADJACENT TO SITE 2686V2-6. SEE TABLE 3d AND FIGURES 3 AND 7 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-163607-1 AND 500-162753-4

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.
Street Address:	420 Eisenhower Lane North
City:	Lombard State: IL Zip Code: 60148
Phone:	630-953-3332

Savo Radulovic
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-6
UP Railroad Tracks

Sample ID	2686V2-6-B01	2686V2-6-B02	2686V2-6-B03-1	2686V2-6-B03-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8	0-8	0-8	8-16					
Sample Date	5/17/2019	5/17/2019	5/2/2019	5/2/2019					
PID	0	0	0	0					
Sample pH	8.6	8.7	8.5	8.5	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.									

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163607-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
6/5/2019 5:57:50 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-6-B01 **Lab Sample ID: 500-163607-1**
Date Collected: 05/17/19 10:00 **Matrix: Solid**
Date Received: 05/17/19 16:17 **Percent Solids: 82.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 15:12*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/28/19 15:12*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/17/19 18:04*	*05/28/19 15:12*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/17/19 18:04*	*05/28/19 15:12*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19	F1	0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
1,2-Dichlorobenzene	<0.19	F1	0.19	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
1,3-Dichlorobenzene	<0.19	F1	0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
1,4-Dichlorobenzene	<0.19	F1	0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B01
Date Collected: 05/17/19 10:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-1
Matrix: Solid
Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.088	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,4,6-Trichlorophenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,4-Dinitrophenol	<0.78	F1	0.78	0.68	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,4-Dinitrotoluene	<0.19	F1	0.19	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2,6-Dinitrotoluene	<0.19	F1	0.19	0.076	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2-Chloronaphthalene	<0.19	F1	0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2-Methylnaphthalene	**0.016**	**J F1**	0.078	0.0071	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4-Bromophenyl phenyl ether	<0.19	F1	0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4-Chloro-3-methylphenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4-Nitroaniline	<0.39	F1	0.39	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
4-Nitrophenol	<0.78	F1	0.78	0.37	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Acenaphthene	<0.039	F1	0.039	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Acenaphthylene	<0.039	F1	0.039	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Anthracene	<0.039	F1	0.039	0.0065	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Benzo[a]anthracene	<0.039	F1	0.039	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Benzo[g,h,i]perylene	<0.039	F1	0.039	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Bis(2-chloroethyl)ether	<0.19	F2	0.19	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Bis(2-ethylhexyl) phthalate	<0.19	F1	0.19	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Butyl benzyl phthalate	<0.19	F1	0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Carbazole	<0.19	F1	0.19	0.097	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Dibenz(a,h)anthracene	<0.039	F1	0.039	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Dibenzofuran	<0.19	F1	0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Dimethyl phthalate	<0.19	F1	0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Di-n-butyl phthalate	<0.19	F1	0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Di-n-octyl phthalate	<0.19	F1	0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Hexachlorobutadiene	<0.19	F1	0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Hexachlorocyclopentadiene	<0.78	* F1	0.78	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Hexachloroethane	<0.19	F1	0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B01
Date Collected: 05/17/19 10:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-1
Matrix: Solid
Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039	F1	0.039	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Naphthalene	<0.039	F1	0.039	0.0060	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
N-Nitrosodiphenylamine	<0.19	F1	0.19	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Phenanthrene	**0.031**	**J F1**	0.039	0.0054	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1
Pyrene	<0.039	F1	0.039	0.0077	mg/Kg	☼	05/29/19 18:32	05/30/19 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*55*		*31 - 143*	*05/29/19 18:32*	*05/30/19 16:50*	*1*
2-Fluorobiphenyl	*54*		*43 - 145*	*05/29/19 18:32*	*05/30/19 16:50*	*1*
2-Fluorophenol	*73*		*31 - 166*	*05/29/19 18:32*	*05/30/19 16:50*	*1*
Nitrobenzene-d5	*49*		*37 - 147*	*05/29/19 18:32*	*05/30/19 16:50*	*1*
Phenol-d5	*46*		*30 - 153*	*05/29/19 18:32*	*05/30/19 16:50*	*1*
Terphenyl-d14	*65*		*42 - 157*	*05/29/19 18:32*	*05/30/19 16:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.48**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Arsenic	**6.0**		0.57	0.20	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Barium	**46**		0.57	0.065	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Beryllium	**0.82**		0.23	0.053	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Boron	**20**		2.9	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Cadmium	**0.12**	**B**	0.11	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Calcium	**74000**		57	9.7	mg/Kg	☼	05/24/19 17:11	05/29/19 09:38	5
Chromium	**21**	**B**	0.57	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Copper	**21**		0.57	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Iron	**19000**	**B**	11	5.9	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 09:33	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Manganese	**430**	**B**	0.57	0.083	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Nickel	**34**		0.57	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Potassium	**4100**		29	10	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Silver	**2.0**		0.29	0.074	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Sodium	**260**		57	8.5	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Thallium	**1.7**		0.57	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Vanadium	**23**		0.29	0.067	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1
Zinc	**53**		1.1	0.50	mg/Kg	☼	05/24/19 17:11	05/28/19 17:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.20**	**J**	0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:03	1
Manganese	**1.9**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:03	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B01
Date Collected: 05/17/19 10:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-1
Matrix: Solid
Percent Solids: 82.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 09:42	1
Barium	**0.15**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 09:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 09:42	1
Boron	**0.15**		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 09:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 09:42	1
Calcium	**24**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 09:42	1
Chromium	**0.038**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:42	1
Cobalt	**0.013**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:42	1
Iron	**21**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 09:42	1
Lead	**0.016**		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 09:42	1
Manganese	**0.21**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:42	1
Nickel	**0.029**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:42	1
Potassium	**14**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 09:42	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 09:42	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:42	1
Zinc	**0.088**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 09:42	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:22	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 07:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.018	0.0060	mg/Kg	☼	05/29/19 14:40	05/30/19 08:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	05/31/19 11:00	05/31/19 15:09	1
pH	**8.6**		0.2	0.2	SU			05/24/19 16:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B02
Date Collected: 05/17/19 10:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-2
Matrix: Solid
Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Acetone	**0.0093**	**J**	0.016	0.0068	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/28/19 15:38*	*1*
4-Bromofluorobenzene (Surr)	*89*		*75 - 131*	*05/17/19 18:04*	*05/28/19 15:38*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/28/19 15:38*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/28/19 15:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B02
Date Collected: 05/17/19 10:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-2
Matrix: Solid
Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Hexachlorocyclopentadiene	<0.79	*	0.79	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B02
Date Collected: 05/17/19 10:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-2
Matrix: Solid
Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	05/29/19 18:32	05/30/19 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*62*		*31 - 143*	*05/29/19 18:32*	*05/30/19 17:18*	*1*
2-Fluorobiphenyl	*63*		*43 - 145*	*05/29/19 18:32*	*05/30/19 17:18*	*1*
2-Fluorophenol	*78*		*31 - 166*	*05/29/19 18:32*	*05/30/19 17:18*	*1*
Nitrobenzene-d5	*56*		*37 - 147*	*05/29/19 18:32*	*05/30/19 17:18*	*1*
Phenol-d5	*58*		*30 - 153*	*05/29/19 18:32*	*05/30/19 17:18*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 18:32*	*05/30/19 17:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.54**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Arsenic	**5.5**		0.57	0.20	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Barium	**48**		0.57	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Beryllium	**0.73**		0.23	0.054	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Boron	**18**		2.9	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Cadmium	**0.13**	**B**	0.11	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Calcium	**77000**		57	9.7	mg/Kg	☼	05/24/19 17:11	05/29/19 09:46	5
Chromium	**19**	**B**	0.57	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Cobalt	**13**		0.29	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Copper	**20**		0.57	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Iron	**19000**	**B**	11	6.0	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 09:41	1
Magnesium	**33000**		5.7	2.9	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Manganese	**460**	**B**	0.57	0.083	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Nickel	**32**		0.57	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Potassium	**3600**		29	10	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Silver	**1.9**		0.29	0.074	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Sodium	**230**		57	8.5	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Thallium	**1.6**		0.57	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Vanadium	**21**		0.29	0.068	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1
Zinc	**52**		1.1	0.50	mg/Kg	☼	05/24/19 17:11	05/28/19 17:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.34**	**J**	0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:07	1
Manganese	**2.0**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:07	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Client Sample ID: 2686V2-6-B02
Date Collected: 05/17/19 10:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-2
Matrix: Solid
Percent Solids: 84.2

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 09:46	1
Barium	**0.31**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 09:46	1
Beryllium	**0.0040**		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 09:46	1
Boron	**0.20**		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 09:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 09:46	1
Calcium	**50**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 09:46	1
Chromium	**0.090**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:46	1
Cobalt	**0.032**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:46	1
Iron	**51**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 09:46	1
Lead	**0.040**		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 09:46	1
Manganese	**0.55**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:46	1
Nickel	**0.072**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:46	1
Potassium	**29**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 09:46	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 09:46	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:46	1
Zinc	**0.11**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 09:46	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:27	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 07:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.017	0.0057	mg/Kg	☼	05/29/19 14:40	05/30/19 08:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	05/31/19 11:00	05/31/19 15:09	1
pH	**8.7**		0.2	0.2	SU			05/24/19 16:46	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	06-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact

Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

500-163607 COC

Laboratory

Lab: **Test America - Chicago**
Address: **2417 Bond Street**
University Park, IL 60484
Phone: **708-534-5200**
Contact: **Dick Wright**
email: richard.wright@testamericainc.com

Project Name: AE7-0/8A
Project No.: PTB 184006/018A
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other
Sampler: WILLIAM KLEWICZ

COC No.: 1 of 1
Lab Job No.: 500-163607
Sample Temp: 2.6, 4.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	2686V2-6-B01	5-17	1000	S	X	X					X	X	X	X	X					
2	2686V2-6-B02	5-17	1015	S	X	X					X	X	X	X	X					

Relinquished by:	Date/Time 5/17/19 3:10	Received by:	Date/Time 5/17/19 1610
Relinquished by:	Date/Time 5/17/19 1617	Received by:	Date/Time 5/17/19 1617
Relinquished by:	Date/Time	Received by:	Date/Time

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162753-4
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/20/2019 4:14:19 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-6-B03-1
Date Collected: 05/02/19 11:40
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-23
Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Acetone	**0.016**		0.015	0.0066	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Carbon disulfide	**0.00082**	**J**	0.0038	0.00079	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Methylene Chloride	**0.0020**	**J**	0.0038	0.0015	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/03/19 17:33*	*05/08/19 17:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/03/19 17:33*	*05/08/19 17:52*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/03/19 17:33*	*05/08/19 17:52*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/03/19 17:33*	*05/08/19 17:52*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1

Client Sample ID: 2686V2-6-B03-1
Date Collected: 05/02/19 11:40
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Lab Sample ID: 500-162753-23
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2-Methylnaphthalene	**0.0074**	**J**	0.074	0.0068	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Benzo[a]pyrene	<0.037		0.037	0.0071	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Chrysene	**0.021**	**J**	0.037	0.010	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Fluoranthene	<0.037		0.037	0.0068	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-4

Client Sample ID: 2686V2-6-B03-1
Date Collected: 05/02/19 11:40
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-23
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Phenanthrene	**0.038**		0.037	0.0051	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1
Pyrene	**0.010**	**J**	0.037	0.0073	mg/Kg	☼	05/10/19 17:21	05/13/19 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*31 - 143*	*05/10/19 17:21*	*05/13/19 15:09*	*1*
2-Fluorobiphenyl	*91*		*43 - 145*	*05/10/19 17:21*	*05/13/19 15:09*	*1*
2-Fluorophenol	*100*		*31 - 166*	*05/10/19 17:21*	*05/13/19 15:09*	*1*
Nitrobenzene-d5	*84*		*37 - 147*	*05/10/19 17:21*	*05/13/19 15:09*	*1*
Phenol-d5	*102*		*30 - 153*	*05/10/19 17:21*	*05/13/19 15:09*	*1*
Terphenyl-d14	*102*		*42 - 157*	*05/10/19 17:21*	*05/13/19 15:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.32**	**J**	1.1	0.21	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Arsenic	**3.7**		0.55	0.19	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Barium	**46**		0.55	0.063	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Beryllium	**0.69**		0.22	0.051	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Boron	**15**		2.7	0.26	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Cadmium	**0.20**		0.11	0.020	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Calcium	**71000**	**B**	55	9.3	mg/Kg	☼	05/09/19 15:55	05/13/19 23:02	5
Chromium	**18**		0.55	0.27	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Cobalt	**14**		0.27	0.072	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Copper	**20**		0.55	0.15	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Iron	**17000**		11	5.7	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Magnesium	**31000**		5.5	2.7	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Manganese	**410**		0.55	0.080	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Nickel	**35**		0.55	0.16	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Potassium	**3500**		27	9.7	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Selenium	**0.93**		0.55	0.32	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Silver	**2.4**		0.27	0.071	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Sodium	**280**		55	8.1	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Thallium	**0.79**		0.55	0.27	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Vanadium	**21**		0.27	0.065	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1
Zinc	**50**		1.1	0.48	mg/Kg	☼	05/09/19 15:55	05/10/19 13:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/11/19 15:57	05/13/19 13:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:57	05/13/19 13:45	1
Manganese	**2.1**		0.025	0.010	mg/L		05/11/19 15:57	05/13/19 13:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-4

Client Sample ID: 2686V2-6-B03-1
Date Collected: 05/02/19 11:40
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-23
Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:33	1
Barium	**0.15**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:33	1
Boron	**0.089**	**J**	0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:33	1
Calcium	**22**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:33	1
Chromium	**0.042**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:33	1
Cobalt	**0.017**	**J**	0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:33	1
Iron	**23**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:33	1
Lead	**0.019**		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:33	1
Manganese	**0.22**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:33	1
Nickel	**0.039**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:33	1
Potassium	**15**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:33	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:33	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:33	1
Zinc	**0.064**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:33	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:10	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/13/19 10:35	05/14/19 08:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0062	mg/Kg	☼	05/13/19 14:40	05/14/19 08:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	05/13/19 13:30	05/13/19 16:08	1
pH	**8.5**		0.2	0.2	SU			05/09/19 14:30	1

Client Sample ID: 2686V2-6-B03-2
Date Collected: 05/02/19 11:45
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-24
Matrix: Solid
Percent Solids: 85.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00046	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00062	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Acetone	**0.0075**	**J**	0.015	0.0063	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Bromoform	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Chloroform	<0.0015		0.0015	0.00050	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Tetrachloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00064	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/03/19 17:33	05/08/19 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/03/19 17:33*	*05/08/19 18:18*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/03/19 17:33*	*05/08/19 18:18*	*1*
Dibromofluoromethane	*90*		*75 - 126*	*05/03/19 17:33*	*05/08/19 18:18*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/03/19 17:33*	*05/08/19 18:18*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1

Client Sample ID: 2686V2-6-B03-2
Date Collected: 05/02/19 11:45
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-24
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2-Methylnaphthalene	**0.016**	**J**	0.074	0.0067	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Chrysene	**0.019**	**J**	0.036	0.010	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1

Client Sample ID: 2686V2-6-B03-2
Date Collected: 05/02/19 11:45
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-24
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Phenanthrene	**0.040**		0.036	0.0051	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	☼	05/10/19 17:21	05/13/19 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*31 - 143*	*05/10/19 17:21*	*05/13/19 15:33*	*1*
2-Fluorobiphenyl	*87*		*43 - 145*	*05/10/19 17:21*	*05/13/19 15:33*	*1*
2-Fluorophenol	*97*		*31 - 166*	*05/10/19 17:21*	*05/13/19 15:33*	*1*
Nitrobenzene-d5	*83*		*37 - 147*	*05/10/19 17:21*	*05/13/19 15:33*	*1*
Phenol-d5	*98*		*30 - 153*	*05/10/19 17:21*	*05/13/19 15:33*	*1*
Terphenyl-d14	*100*		*42 - 157*	*05/10/19 17:21*	*05/13/19 15:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.24**	**J**	1.1	0.22	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Arsenic	**5.3**		0.56	0.19	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Barium	**38**		0.56	0.064	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Beryllium	**0.61**		0.23	0.053	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Cadmium	**0.21**	**B**	0.11	0.020	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Calcium	**120000**	**B**	56	9.6	mg/Kg	☼	05/09/19 15:55	05/13/19 23:06	5
Chromium	**14**		0.56	0.28	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Cobalt	**10**		0.28	0.074	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Copper	**17**		0.56	0.16	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Iron	**15000**		11	5.9	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Lead	**9.4**		0.28	0.13	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Magnesium	**42000**		28	14	mg/Kg	☼	05/09/19 15:55	05/13/19 23:06	5
Manganese	**440**		0.56	0.082	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Nickel	**26**		0.56	0.16	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Potassium	**3000**		28	10	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Selenium	**1.1**		0.56	0.33	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Silver	**1.9**		0.28	0.073	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Sodium	**220**		56	8.3	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Thallium	**0.38**	**J**	0.56	0.28	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Vanadium	**18**		0.28	0.067	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1
Zinc	**42**		1.1	0.49	mg/Kg	☼	05/09/19 15:55	05/10/19 14:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/11/19 15:53	05/13/19 21:37	1
Barium	**0.069**	**J**	0.50	0.050	mg/L		05/11/19 15:53	05/13/19 21:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/11/19 15:53	05/13/19 21:37	1
Boron	<0.10		0.10	0.050	mg/L		05/11/19 15:53	05/13/19 21:37	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-4

Client Sample ID: 2686V2-6-B03-2
Date Collected: 05/02/19 11:45
Date Received: 05/03/19 12:20

Lab Sample ID: 500-162753-24
Matrix: Solid
Percent Solids: 85.5

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/11/19 15:53	05/13/19 21:37	1
Calcium	**14**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:37	1
Chromium	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:37	1
Cobalt	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:37	1
Iron	**4.8**		0.40	0.20	mg/L		05/11/19 15:53	05/13/19 21:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/11/19 15:53	05/13/19 21:37	1
Manganese	**0.052**		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:37	1
Nickel	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:37	1
Potassium	**5.1**		2.5	0.50	mg/L		05/11/19 15:53	05/13/19 21:37	1
Selenium	<0.050		0.050	0.020	mg/L		05/11/19 15:53	05/13/19 21:37	1
Silver	<0.025		0.025	0.010	mg/L		05/11/19 15:53	05/13/19 21:37	1
Zinc	**0.17**	**J**	0.50	0.020	mg/L		05/11/19 15:53	05/13/19 21:37	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/11/19 15:53	05/13/19 19:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/11/19 15:53	05/13/19 19:14	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/13/19 10:35	05/14/19 08:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.017	0.0057	mg/Kg	☼	05/13/19 14:40	05/14/19 08:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	05/13/19 13:30	05/13/19 16:09	1
pH	**8.5**		0.2	0.2	SU			05/09/19 14:33	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-4

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162753-4

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING

AE7-0184

Client Contact	Laboratory	Project Name: [redacted]	COC No.: 1 of 1
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project No.: PTB 184-006/[redacted]018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** W. Mirwin	Lab Job No.: 500-162753 Sample Temp:

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
	~~2686V2-6-B01~~			S	X	X					X	X	X	X	X					
	~~2686V2-6-B02~~																			
23	2686V2-6-B03-1	5-2-19	1140																	
24	2686V2-6-B03-2	5-2-19	1145																	
	~~2686V2-6-B04-1~~																			
	~~2686V2-6-B04-2~~																			

Relinquished by:	Date/Time 5/2/19 9:30	Received by: TA	Date/Time 5/3/19 945
Relinquished by: TA	Date/Time 5/3/19 1220	Received by: TA-CHI	Date/Time 5/3/19 1220
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):
600 block of West Deerpath Road (northeast and southeast quadrants of West Deerpath Road and US 41)

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24695 (Decimal Degrees) Longitude: -87.86083 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 2,064

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24695 Longitude: - 87.86083

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-7-B01, -B02, -B03, -B06, -B09, -B10 AND -B11 WERE SAMPLED ADJACENT TO SITE 2686V2-7. SEE TABLE 3e AND FIGURES 3, 4, AND 8 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-163607-2, 500-163058-1 AND 500-163559-1

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.
Street Address:	420 Eisenhower Lane North
City:	Lombard State: IL Zip Code: 60148
Phone:	630-953-3332

Savo Radulovic
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-7

Skokie Valley Trail and Utility Easement

Sample ID	2686V2-7-B01	2686V2-7-B02-1	2686V2-7-B02-2	2686V2-7-B02-2 DUP	2686V2-7-B03	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8	0-7	7-14	7-14	0-8					
Sample Date	5/17/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019					
PID	0	0	0	0	0					
Sample pH	8.5	7.7	7.8	7.9	7.9	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.										

Sample ID	2686V2-7-B06-1	2686V2-7-B06-2	2686V2-7-B06-3	2686V2-7-B06-3 DUP	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8	8-16	16-24	16-24					
Sample Date	5/8/2019	5/8/2019	5/8/2019	5/8/2019					
PID	0	0	0	0					
Sample pH	8.7	8.2	8.7	8.5	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.									

Sample ID	2686V2-7-B09	2686V2-7-B10	2686V2-7-B11-1	2686V2-7-B11-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-6	0-8	0-8	8-16					
Sample Date	5/8/2019	5/16/2019	5/8/2019	5/8/2019					
PID	0	0	0	0					
Sample pH	8.6	7.9	8.6	8.3	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.									

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163607-2
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
6/5/2019 5:59:07 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B03
Date Collected: 05/17/19 09:20
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-3
Matrix: Solid
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/17/19 18:04*	*05/28/19 16:04*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/17/19 18:04*	*05/28/19 16:04*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/17/19 18:04*	*05/28/19 16:04*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/28/19 16:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1

Client Sample ID: 2686V2-7-B03
Date Collected: 05/17/19 09:20
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-3
Matrix: Solid
Percent Solids: 86.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B03
Date Collected: 05/17/19 09:20
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-3
Matrix: Solid
Percent Solids: 86.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*66*		*31 - 143*	*05/29/19 18:32*	*05/30/19 17:46*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*05/29/19 18:32*	*05/30/19 17:46*	*1*
2-Fluorophenol	*82*		*31 - 166*	*05/29/19 18:32*	*05/30/19 17:46*	*1*
Nitrobenzene-d5	*56*		*37 - 147*	*05/29/19 18:32*	*05/30/19 17:46*	*1*
Phenol-d5	*56*		*30 - 153*	*05/29/19 18:32*	*05/30/19 17:46*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 18:32*	*05/30/19 17:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.47**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Arsenic	**6.3**		0.57	0.20	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Barium	**38**		0.57	0.065	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Beryllium	**0.78**		0.23	0.053	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Boron	**17**		2.9	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Cadmium	**0.16**	**B**	0.11	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Calcium	**72000**		57	9.7	mg/Kg	☼	05/24/19 17:11	05/29/19 09:54	5
Chromium	**21**	**B**	0.57	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Copper	**21**		0.57	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Iron	**19000**	**B**	11	5.9	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 09:50	1
Magnesium	**31000**		5.7	2.8	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Manganese	**430**	**B**	0.57	0.083	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Nickel	**35**		0.57	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Potassium	**3800**		29	10	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Silver	**2.0**		0.29	0.074	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Sodium	**210**		57	8.4	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Thallium	**1.9**		0.57	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Vanadium	**22**		0.29	0.067	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1
Zinc	**54**		1.1	0.50	mg/Kg	☼	05/24/19 17:11	05/28/19 17:57	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 09:50	1
Barium	<0.50		0.50	0.050	mg/L		05/30/19 14:31	05/31/19 09:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 09:50	1
Boron	<0.10		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 09:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B03
Date Collected: 05/17/19 09:20
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-3
Matrix: Solid
Percent Solids: 86.1

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 09:50	1
Calcium	**130**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 09:50	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:50	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:50	1
Iron	<0.40		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 09:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 09:50	1
Manganese	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:50	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:50	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 09:50	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 09:50	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 09:50	1
Zinc	<0.50		0.50	0.020	mg/L		05/30/19 14:31	05/31/19 09:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:31	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 07:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.018	0.0059	mg/Kg	☼	05/29/19 14:40	05/30/19 08:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	05/31/19 11:00	05/31/19 15:10	1
pH	**7.9**		0.2	0.2	SU			05/24/19 16:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-1
Date Collected: 05/17/19 09:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-4
Matrix: Solid
Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/28/19 16:29*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/28/19 16:29*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/28/19 16:29*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/17/19 18:04*	*05/28/19 16:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1

Client Sample ID: 2686V2-7-B02-1
Date Collected: 05/17/19 09:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-4
Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-1
Date Collected: 05/17/19 09:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-4
Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Phenanthrene	**0.016**	**J**	0.038	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*69*		*31 - 143*	*05/29/19 18:32*	*05/30/19 18:14*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*05/29/19 18:32*	*05/30/19 18:14*	*1*
2-Fluorophenol	*83*		*31 - 166*	*05/29/19 18:32*	*05/30/19 18:14*	*1*
Nitrobenzene-d5	*57*		*37 - 147*	*05/29/19 18:32*	*05/30/19 18:14*	*1*
Phenol-d5	*61*		*30 - 153*	*05/29/19 18:32*	*05/30/19 18:14*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 18:32*	*05/30/19 18:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.52**	**J**	1.2	0.23	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Arsenic	**5.6**		0.58	0.20	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Barium	**46**		0.58	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Beryllium	**0.80**		0.23	0.054	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Boron	**17**		2.9	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Cadmium	**0.15**	**B**	0.12	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Calcium	**76000**		58	9.9	mg/Kg	☼	05/24/19 17:11	05/29/19 10:14	5
Chromium	**20**	**B**	0.58	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Cobalt	**14**		0.29	0.076	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Copper	**21**		0.58	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Iron	**19000**	**B**	12	6.1	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 09:58	1
Magnesium	**31000**		5.8	2.9	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Manganese	**440**	**B**	0.58	0.085	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Nickel	**34**		0.58	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Potassium	**3800**		29	10	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Silver	**2.0**		0.29	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Sodium	**280**		58	8.6	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Thallium	**1.6**		0.58	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Vanadium	**22**		0.29	0.069	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1
Zinc	**54**		1.2	0.51	mg/Kg	☼	05/24/19 17:11	05/28/19 18:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 10:14	1
Barium	<0.50		0.50	0.050	mg/L		05/30/19 14:31	05/31/19 10:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 10:14	1
Boron	<0.10		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 10:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-1
Date Collected: 05/17/19 09:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-4
Matrix: Solid
Percent Solids: 85.2

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 10:14	1
Calcium	**160**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:14	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:14	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:14	1
Iron	<0.40		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 10:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 10:14	1
Manganese	**0.013**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:14	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:14	1
Potassium	**2.0**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:14	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 10:14	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:14	1
Zinc	**0.062**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 10:14	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:35	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 07:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0062	mg/Kg	☼	05/29/19 14:40	05/30/19 08:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/31/19 11:00	05/31/19 15:10	1
pH	**7.7**		0.2	0.2	SU			05/24/19 16:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-2
Date Collected: 05/17/19 09:35
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-5
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Acetone	**0.0083**	**J**	0.016	0.0070	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/17/19 18:04*	*05/28/19 16:55*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/17/19 18:04*	*05/28/19 16:55*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/28/19 16:55*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/17/19 18:04*	*05/28/19 16:55*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1

Client Sample ID: 2686V2-7-B02-2
Date Collected: 05/17/19 09:35
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-5
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Methylnaphthalene	**0.012**	**J**	0.078	0.0071	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-2
Date Collected: 05/17/19 09:35
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-5
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*31 - 143*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
2-Fluorobiphenyl	*62*		*43 - 145*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
2-Fluorophenol	*92*		*31 - 166*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
Nitrobenzene-d5	*55*		*37 - 147*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
Phenol-d5	*62*		*30 - 153*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 18:32*	*05/30/19 18:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.50**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Arsenic	**5.6**		0.56	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Barium	**46**		0.56	0.063	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Beryllium	**0.75**		0.22	0.052	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Boron	**18**		2.8	0.26	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Cadmium	**0.13**	**B**	0.11	0.020	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Calcium	**76000**		56	9.4	mg/Kg	☼	05/24/19 17:11	05/29/19 10:22	5
Chromium	**20**	**B**	0.56	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Cobalt	**13**		0.28	0.073	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Copper	**21**		0.56	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Iron	**19000**	**B**	11	5.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 10:18	1
Magnesium	**31000**		5.6	2.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Manganese	**420**	**B**	0.56	0.081	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Nickel	**33**		0.56	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Potassium	**3800**		28	9.9	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Silver	**2.0**		0.28	0.072	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Sodium	**320**		56	8.2	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Thallium	**1.6**		0.56	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Vanadium	**22**		0.28	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1
Zinc	**53**		1.1	0.49	mg/Kg	☼	05/24/19 17:11	05/28/19 18:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 10:19	1
Barium	**0.053**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 10:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 10:19	1
Boron	<0.10		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 10:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-2
Date Collected: 05/17/19 09:35
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-5
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 10:19	1
Calcium	**21**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:19	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:19	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:19	1
Iron	<0.40		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 10:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 10:19	1
Manganese	**0.017**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:19	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:19	1
Potassium	**1.8**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:19	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 10:19	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:19	1
Zinc	<0.50		0.50	0.020	mg/L		05/30/19 14:31	05/31/19 10:19	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 07:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.018	0.0061	mg/Kg	☼	05/29/19 14:40	05/30/19 08:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/31/19 11:00	05/31/19 15:10	1
pH	**7.8**		0.2	0.2	SU			05/24/19 16:46	1

Client Sample ID: 2686V2-7-B02-2 Dup **Lab Sample ID: 500-163607-6**
Date Collected: 05/17/19 09:40 **Matrix: Solid**
Date Received: 05/17/19 16:17 **Percent Solids: 84.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Acetone	**0.017**		0.016	0.0068	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 17:21*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/17/19 18:04*	*05/28/19 17:21*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/17/19 18:04*	*05/28/19 17:21*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/17/19 18:04*	*05/28/19 17:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1

Client Sample ID: 2686V2-7-B02-2 Dup
Date Collected: 05/17/19 09:40
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-6
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Methylnaphthalene	**0.015**	**J**	0.079	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B02-2 Dup

Date Collected: 05/17/19 09:40
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-6

Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*70*		*31 - 143*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
2-Fluorophenol	*76*		*31 - 166*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
Nitrobenzene-d5	*56*		*37 - 147*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
Phenol-d5	*53*		*30 - 153*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
Terphenyl-d14	*75*		*42 - 157*	*05/29/19 18:32*	*05/30/19 19:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.23**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Arsenic	**5.3**		0.57	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Barium	**49**		0.57	0.065	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Beryllium	**0.73**		0.23	0.053	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Boron	**16**		2.8	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Cadmium	**0.13**	**B**	0.11	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Calcium	**74000**		57	9.7	mg/Kg	☼	05/24/19 17:11	05/29/19 10:30	5
Chromium	**19**	**B**	0.57	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Cobalt	**13**		0.28	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Copper	**20**		0.57	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Iron	**18000**	**B**	11	5.9	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 10:26	1
Magnesium	**32000**		5.7	2.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Manganese	**420**	**B**	0.57	0.083	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Nickel	**32**		0.57	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Potassium	**3600**		28	10	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Silver	**2.0**		0.28	0.073	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Sodium	**310**		57	8.4	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Thallium	**1.6**		0.57	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Vanadium	**21**		0.28	0.067	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1
Zinc	**51**		1.1	0.50	mg/Kg	☼	05/24/19 17:11	05/28/19 18:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 10:23	1
Barium	**0.051**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 10:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 10:23	1
Boron	**0.061**	**J**	0.10	0.050	mg/L		05/30/19 14:31	05/31/19 10:23	1

Client Sample ID: 2686V2-7-B02-2 Dup

Date Collected: 05/17/19 09:40
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-6

Matrix: Solid
Percent Solids: 84.7

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 10:23	1
Calcium	**19**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:23	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:23	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:23	1
Iron	<0.40		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 10:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 10:23	1
Manganese	**0.012**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:23	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:23	1
Potassium	**2.0**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:23	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 10:23	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:23	1
Zinc	<0.50		0.50	0.020	mg/L		05/30/19 14:31	05/31/19 10:23	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:43	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 07:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0063	mg/Kg	☼	05/29/19 14:40	05/30/19 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/31/19 11:00	05/31/19 15:10	1
pH	**7.9**		0.2	0.2	SU			05/24/19 16:46	1

Client Sample ID: 2686V2-7-B01 **Lab Sample ID: 500-163607-7**
Date Collected: 05/17/19 09:45 **Matrix: Solid**
Date Received: 05/17/19 16:17 **Percent Solids: 84.3**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Acetone	**0.0093**	**J**	0.017	0.0076	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/28/19 17:46*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/17/19 18:04*	*05/28/19 17:46*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/28/19 17:46*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/17/19 18:04*	*05/28/19 17:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1

Client Sample ID: 2686V2-7-B01
Date Collected: 05/17/19 09:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-7
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1

Client Sample ID: 2686V2-7-B01
Date Collected: 05/17/19 09:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-7
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Phenanthrene	**0.028**	**J**	0.037	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*58*		*31 - 143*	*05/29/19 18:32*	*05/30/19 19:37*	*1*
2-Fluorobiphenyl	*51*		*43 - 145*	*05/29/19 18:32*	*05/30/19 19:37*	*1*
2-Fluorophenol	*74*		*31 - 166*	*05/29/19 18:32*	*05/30/19 19:37*	*1*
Nitrobenzene-d5	*48*		*37 - 147*	*05/29/19 18:32*	*05/30/19 19:37*	*1*
Phenol-d5	*52*		*30 - 153*	*05/29/19 18:32*	*05/30/19 19:37*	*1*
Terphenyl-d14	*68*		*42 - 157*	*05/29/19 18:32*	*05/30/19 19:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.47**	**J**	1.2	0.23	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Arsenic	**6.0**		0.58	0.20	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Barium	**50**		0.58	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Beryllium	**0.72**		0.23	0.054	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Boron	**16**		2.9	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Cadmium	**0.17**	**B**	0.12	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Calcium	**75000**		58	9.9	mg/Kg	☼	05/24/19 17:11	05/29/19 10:38	5
Chromium	**19**	**B**	0.58	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Cobalt	**13**		0.29	0.076	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Copper	**22**		0.58	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Iron	**18000**	**B**	12	6.1	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Lead	**11**		0.29	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 10:34	1
Magnesium	**31000**		5.8	2.9	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Manganese	**420**	**B**	0.58	0.085	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Nickel	**33**		0.58	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Potassium	**3500**		29	10	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Silver	**1.9**		0.29	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Sodium	**240**		58	8.6	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Thallium	**1.6**		0.58	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Vanadium	**20**		0.29	0.069	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1
Zinc	**59**		1.2	0.51	mg/Kg	☼	05/24/19 17:11	05/28/19 18:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.28**	**J**	0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:11	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:11	1
Manganese	**1.9**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:11	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Client Sample ID: 2686V2-7-B01
Date Collected: 05/17/19 09:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-7
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 10:27	1
Barium	**0.14**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 10:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 10:27	1
Boron	**0.11**		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 10:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 10:27	1
Calcium	**25**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:27	1
Chromium	**0.035**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:27	1
Cobalt	**0.012**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:27	1
Iron	**20**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 10:27	1
Lead	**0.017**		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 10:27	1
Manganese	**0.20**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:27	1
Nickel	**0.026**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:27	1
Potassium	**13**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:27	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 10:27	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:27	1
Zinc	**0.042**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 10:27	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:47	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 09:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0064	mg/Kg	☼	05/29/19 14:40	05/30/19 08:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/31/19 11:00	05/31/19 15:11	1
pH	**8.5**		0.2	0.2	SU			05/24/19 17:04	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-2

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	06-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: AE7-018A Project No.: PTB 184006/018A TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other Sampler: WILLIAM ULEWICZ

COC No.: 1 of 1

Lab Job No.: 500-163607

Sample Temp: 2.6, 4.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
3	2686V2-7-B03	5-17	0920	S	X	X					X	X	X	X	X					
4	2686V2-7-B02-1	↓	0930	↓	↓	↓					↓	↓	↓	↓	↓					
5	2686V2-7-B02-2		0935																	
6	2686V2-7-B02-2 DUP		0940																	
7	2686V2-7-B01	↓	0945	↓	↓	↓					↓	↓	↓	↓	↓					
8	TRIP BLANK #5	↓			X															

Relinquished by:	Date/Time	Received by:	Date/Time
	5/17/19 1510		5/17/19 1510
	5/17/19 1617		5/17/19 1617

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163058-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/24/2019 2:30:29 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B11-1
Date Collected: 05/08/19 09:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-1
Matrix: Solid
Percent Solids: 78.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Acetone	**0.0094**	**J**	0.018	0.0077	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Chloromethane	<0.0044	*	0.0044	0.0018	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Methylene Chloride	<0.0044		0.0044	0.0018	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/09/19 17:24	05/16/19 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/09/19 17:24*	*05/16/19 01:08*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/09/19 17:24*	*05/16/19 01:08*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/09/19 17:24*	*05/16/19 01:08*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*05/09/19 17:24*	*05/16/19 01:08*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1

Client Sample ID: 2686V2-7-B11-1
Date Collected: 05/08/19 09:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-1
Matrix: Solid
Percent Solids: 78.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Fluoranthene	**0.010**	**J**	0.041	0.0077	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B11-1
Date Collected: 05/08/19 09:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-1
Matrix: Solid
Percent Solids: 78.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Naphthalene	**0.0067**	**J**	0.041	0.0064	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Phenanthrene	**0.014**	**J**	0.041	0.0058	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	05/17/19 18:15	05/20/19 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*105*		*31 - 143*	*05/17/19 18:15*	*05/20/19 13:35*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*05/17/19 18:15*	*05/20/19 13:35*	*1*
2-Fluorophenol	*91*		*31 - 166*	*05/17/19 18:15*	*05/20/19 13:35*	*1*
Nitrobenzene-d5	*67*		*37 - 147*	*05/17/19 18:15*	*05/20/19 13:35*	*1*
Phenol-d5	*68*		*30 - 153*	*05/17/19 18:15*	*05/20/19 13:35*	*1*
Terphenyl-d14	*97*		*42 - 157*	*05/17/19 18:15*	*05/20/19 13:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.60**	**J F1**	1.2	0.23	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Arsenic	**5.0**	**F1 F2**	0.59	0.20	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Barium	**90**	**F1**	0.59	0.067	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Beryllium	**0.98**		0.24	0.055	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Boron	**5.1**	**F1**	3.0	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Cadmium	**0.30**	**F1**	0.12	0.021	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Calcium	**8400**	**B**	12	2.0	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Chromium	**26**		0.59	0.29	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Cobalt	**15**		0.30	0.077	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Copper	**28**	**F1**	0.59	0.17	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Iron	**28000**	**B**	12	6.1	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Lead	**15**		0.30	0.14	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Magnesium	**8200**		5.9	2.9	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Manganese	**130**		0.59	0.086	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Nickel	**42**		0.59	0.17	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Potassium	**2000**	**F1**	30	10	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Selenium	**0.47**	**J F1**	0.59	0.35	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Silver	**3.7**		0.30	0.076	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Sodium	**79**		59	8.7	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Thallium	**1.5**		0.59	0.29	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Vanadium	**31**		0.30	0.070	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1
Zinc	**74**		1.2	0.52	mg/Kg	☼	05/15/19 17:36	05/16/19 20:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		05/20/19 07:26	05/20/19 22:40	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B11-1
Date Collected: 05/08/19 09:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-1
Matrix: Solid
Percent Solids: 78.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/20/19 07:23	05/20/19 18:18	1
Barium	<0.50		0.50	0.050	mg/L		05/20/19 07:23	05/20/19 18:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 18:18	1
Boron	<0.10		0.10	0.050	mg/L		05/20/19 07:23	05/20/19 18:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 18:18	1
Calcium	**11**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 18:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:18	1
Cobalt	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:18	1
Iron	**6.8**		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 18:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 18:18	1
Manganese	**0.019**	**J**	0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:18	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:18	1
Potassium	**2.4**	**J**	2.5	0.50	mg/L		05/20/19 07:23	05/20/19 18:18	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 18:18	1
Silver	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:18	1
Zinc	<0.50	^	0.50	0.020	mg/L		05/20/19 07:23	05/20/19 18:18	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 00:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 00:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/21/19 09:55	05/22/19 07:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.021	0.0069	mg/Kg	☼	05/20/19 15:15	05/21/19 08:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56	F2	0.56	0.19	mg/Kg	☼	05/21/19 17:10	05/22/19 10:46	1
pH	**8.6**		0.2	0.2	SU			05/15/19 16:02	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B11-2
Date Collected: 05/08/19 09:10
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-2
Matrix: Solid
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00062	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Acetone	<0.015		0.015	0.0063	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Chloromethane	<0.0036	*	0.0036	0.0015	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00064	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/09/19 17:24	05/16/19 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/09/19 17:24*	*05/16/19 01:49*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/09/19 17:24*	*05/16/19 01:49*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*05/09/19 17:24*	*05/16/19 01:49*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/09/19 17:24*	*05/16/19 01:49*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1

Client Sample ID: 2686V2-7-B11-2
Date Collected: 05/08/19 09:10
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-2
Matrix: Solid
Percent Solids: 86.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Chrysene	**0.011**	**J**	0.037	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Fluoranthene	**0.0095**	**J**	0.037	0.0070	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B11-2
Date Collected: 05/08/19 09:10
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-2
Matrix: Solid
Percent Solids: 86.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Naphthalene	**0.0099**	**J**	0.037	0.0058	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Phenanthrene	**0.022**	**J**	0.037	0.0052	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1
Pyrene	**0.013**	**J**	0.037	0.0075	mg/Kg	☼	05/17/19 18:15	05/20/19 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*31 - 143*	*05/17/19 18:15*	*05/20/19 15:02*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*05/17/19 18:15*	*05/20/19 15:02*	*1*
2-Fluorophenol	*79*		*31 - 166*	*05/17/19 18:15*	*05/20/19 15:02*	*1*
Nitrobenzene-d5	*61*		*37 - 147*	*05/17/19 18:15*	*05/20/19 15:02*	*1*
Phenol-d5	*56*		*30 - 153*	*05/17/19 18:15*	*05/20/19 15:02*	*1*
Terphenyl-d14	*89*		*42 - 157*	*05/17/19 18:15*	*05/20/19 15:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.67**	**J**	1.1	0.21	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Arsenic	**6.8**		0.53	0.18	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Barium	**43**		0.53	0.061	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Beryllium	**0.67**		0.21	0.050	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Boron	**15**		2.7	0.25	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Cadmium	**0.23**		0.11	0.019	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Calcium	**73000**	**B**	53	9.1	mg/Kg	☼	05/15/19 17:36	05/17/19 12:15	5
Chromium	**19**		0.53	0.26	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Cobalt	**13**		0.27	0.070	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Copper	**21**		0.53	0.15	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Iron	**17000**	**B**	11	5.6	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Lead	**11**		0.27	0.12	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Magnesium	**31000**		5.3	2.6	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Manganese	**410**		0.53	0.077	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Nickel	**33**		0.53	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Potassium	**3500**		27	9.5	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Silver	**2.1**		0.27	0.069	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Sodium	**200**		53	7.9	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Thallium	**0.76**		0.53	0.27	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Vanadium	**21**		0.27	0.063	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1
Zinc	**48**		1.1	0.47	mg/Kg	☼	05/15/19 17:36	05/16/19 20:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/20/19 07:23	05/20/19 18:22	1
Barium	**0.052**	**J**	0.50	0.050	mg/L		05/20/19 07:23	05/20/19 18:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 18:22	1
Boron	<0.10		0.10	0.050	mg/L		05/20/19 07:23	05/20/19 18:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B11-2
Date Collected: 05/08/19 09:10
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-2
Matrix: Solid
Percent Solids: 86.1

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 18:22	1
Calcium	**19**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 18:22	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:22	1
Cobalt	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:22	1
Iron	**2.3**		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 18:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 18:22	1
Manganese	**0.039**		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:22	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:22	1
Potassium	**3.7**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 18:22	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 18:22	1
Silver	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:22	1
Zinc	**0.058**	**J ^ B**	0.50	0.020	mg/L		05/20/19 07:23	05/20/19 18:22	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 00:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 00:43	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/21/19 09:55	05/22/19 07:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0060	mg/Kg	☼	05/20/19 15:15	05/21/19 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.17	mg/Kg	☼	05/21/19 17:10	05/22/19 10:47	1
pH	**8.3**		0.2	0.2	SU			05/15/19 16:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-1
Date Collected: 05/08/19 10:00
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-9
Matrix: Solid
Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Chloromethane	<0.0038	*	0.0038	0.0015	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Methylene Chloride	**0.0016**	**J**	0.0038	0.0015	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/09/19 17:24	05/16/19 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/09/19 17:24*	*05/16/19 06:23*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/09/19 17:24*	*05/16/19 06:23*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/09/19 17:24*	*05/16/19 06:23*	*1*
Toluene-d8 (Surr)	*112*		*75 - 124*	*05/09/19 17:24*	*05/16/19 06:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1

Client Sample ID: 2686V2-7-B06-1
Date Collected: 05/08/19 10:00
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-9
Matrix: Solid
Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2-Methylnaphthalene	<0.082		0.082	0.0074	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.32	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-1
Date Collected: 05/08/19 10:00
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-9
Matrix: Solid
Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	05/17/19 18:15	05/20/19 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*05/17/19 18:15*	*05/20/19 17:55*	*1*
2-Fluorobiphenyl	*71*		*43 - 145*	*05/17/19 18:15*	*05/20/19 17:55*	*1*
2-Fluorophenol	*65*		*31 - 166*	*05/17/19 18:15*	*05/20/19 17:55*	*1*
Nitrobenzene-d5	*50*		*37 - 147*	*05/17/19 18:15*	*05/20/19 17:55*	*1*
Phenol-d5	*51*		*30 - 153*	*05/17/19 18:15*	*05/20/19 17:55*	*1*
Terphenyl-d14	*89*		*42 - 157*	*05/17/19 18:15*	*05/20/19 17:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.65**	**J**	1.2	0.24	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Arsenic	**5.3**		0.61	0.21	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Barium	**75**		0.61	0.069	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Beryllium	**0.97**		0.24	0.057	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Boron	**13**		3.0	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Cadmium	**0.24**		0.12	0.022	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Calcium	**15000**	**B**	12	2.1	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Chromium	**27**		0.61	0.30	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Cobalt	**17**		0.30	0.079	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Copper	**23**		0.61	0.17	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Iron	**23000**	**B**	12	6.3	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Lead	**16**		0.30	0.14	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Magnesium	**15000**		6.1	3.0	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Manganese	**480**		0.61	0.088	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Nickel	**42**		0.61	0.18	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Potassium	**3400**		30	11	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Selenium	<0.61		0.61	0.36	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Silver	**3.7**		0.30	0.078	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Sodium	**120**		61	9.0	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Thallium	**1.2**		0.61	0.30	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Vanadium	**31**		0.30	0.071	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1
Zinc	**65**		1.2	0.53	mg/Kg	☼	05/15/19 17:36	05/16/19 21:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/20/19 07:23	05/20/19 18:58	1
Barium	<0.50		0.50	0.050	mg/L		05/20/19 07:23	05/20/19 18:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 18:58	1
Boron	<0.10		0.10	0.050	mg/L		05/20/19 07:23	05/20/19 18:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-1
Date Collected: 05/08/19 10:00
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-9
Matrix: Solid
Percent Solids: 81.9

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 18:58	1
Calcium	**9.1**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 18:58	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:58	1
Cobalt	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:58	1
Iron	**1.0**		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 18:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 18:58	1
Manganese	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:58	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:58	1
Potassium	**0.88**	**J**	2.5	0.50	mg/L		05/20/19 07:23	05/20/19 18:58	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 18:58	1
Silver	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 18:58	1
Zinc	<0.50	^	0.50	0.020	mg/L		05/20/19 07:23	05/20/19 18:58	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 01:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 01:20	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/21/19 09:55	05/22/19 08:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.019	0.0063	mg/Kg	☼	05/20/19 15:15	05/21/19 08:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.18	mg/Kg	☼	05/21/19 17:10	05/22/19 10:50	1
pH	**8.7**		0.2	0.2	SU			05/15/19 16:23	1

Client Sample ID: 2686V2-7-B06-2

Date Collected: 05/08/19 10:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-10

Matrix: Solid
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/09/19 17:24	05/16/19 06:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/09/19 17:24*	*05/16/19 06:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/09/19 17:24*	*05/16/19 06:48*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*05/09/19 17:24*	*05/16/19 06:48*	*1*
Toluene-d8 (Surr)	*87*		*75 - 124*	*05/09/19 17:24*	*05/16/19 06:48*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-2
Date Collected: 05/08/19 10:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-10
Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-2
Date Collected: 05/08/19 10:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-10
Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	05/17/19 18:15	05/20/19 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*31 - 143*	*05/17/19 18:15*	*05/20/19 18:24*	*1*
2-Fluorobiphenyl	*76*		*43 - 145*	*05/17/19 18:15*	*05/20/19 18:24*	*1*
2-Fluorophenol	*73*		*31 - 166*	*05/17/19 18:15*	*05/20/19 18:24*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/17/19 18:15*	*05/20/19 18:24*	*1*
Phenol-d5	*57*		*30 - 153*	*05/17/19 18:15*	*05/20/19 18:24*	*1*
Terphenyl-d14	*88*		*42 - 157*	*05/17/19 18:15*	*05/20/19 18:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.78**	**J**	1.1	0.22	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Arsenic	**4.1**		0.56	0.19	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Barium	**54**		0.56	0.064	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Beryllium	**0.73**		0.23	0.053	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Cadmium	**0.26**		0.11	0.020	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Calcium	**72000**	**B**	56	9.6	mg/Kg	☼	05/15/19 17:36	05/17/19 12:42	5
Chromium	**21**		0.56	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Cobalt	**14**		0.28	0.074	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Copper	**20**		0.56	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Iron	**18000**	**B**	11	5.9	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Magnesium	**30000**		5.6	2.8	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Manganese	**410**		0.56	0.082	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Nickel	**34**		0.56	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Potassium	**3900**		28	10	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Selenium	**0.48**	**J**	0.56	0.33	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Silver	**2.5**		0.28	0.073	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Sodium	**240**		56	8.4	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Thallium	**0.82**		0.56	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Vanadium	**24**		0.28	0.067	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1
Zinc	**57**		1.1	0.50	mg/Kg	☼	05/15/19 17:36	05/16/19 21:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/20/19 07:23	05/20/19 19:02	1
Barium	<0.50		0.50	0.050	mg/L		05/20/19 07:23	05/20/19 19:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 19:02	1
Boron	<0.10		0.10	0.050	mg/L		05/20/19 07:23	05/20/19 19:02	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-2
Date Collected: 05/08/19 10:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-10
Matrix: Solid
Percent Solids: 84.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 19:02	1
Calcium	**15**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:02	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:02	1
Cobalt	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:02	1
Iron	<0.40		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 19:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 19:02	1
Manganese	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:02	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:02	1
Potassium	**0.64**	**J**	2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 19:02	1
Silver	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:02	1
Zinc	<0.50	^	0.50	0.020	mg/L		05/20/19 07:23	05/20/19 19:02	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 01:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 01:24	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/21/19 09:55	05/22/19 08:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.019	0.0062	mg/Kg	☼	05/20/19 15:15	05/21/19 08:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/21/19 17:10	05/22/19 10:50	1
pH	**8.2**		0.2	0.2	SU			05/15/19 16:25	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-3
Date Collected: 05/08/19 10:35
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-11
Matrix: Solid
Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Acetone	**0.011**	**J**	0.017	0.0074	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Styrene	**0.0012**	**J**	0.0017	0.00051	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/09/19 17:24	05/17/19 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/09/19 17:24*	*05/17/19 19:10*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/09/19 17:24*	*05/17/19 19:10*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/09/19 17:24*	*05/17/19 19:10*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/09/19 17:24*	*05/17/19 19:10*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-3
Date Collected: 05/08/19 10:35
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-11
Matrix: Solid
Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2-Methylnaphthalene	**0.026**	**J**	0.080	0.0073	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Anthracene	**0.025**	**J**	0.039	0.0066	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Benzo[a]anthracene	**0.026**	**J**	0.039	0.0053	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Benzo[a]pyrene	**0.020**	**J**	0.039	0.0076	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Benzo[b]fluoranthene	**0.032**	**J**	0.039	0.0085	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Chrysene	**0.035**	**J**	0.039	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Fluoranthene	**0.10**		0.039	0.0073	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Fluorene	**0.021**	**J**	0.039	0.0055	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1

Client Sample ID: 2686V2-7-B06-3
Date Collected: 05/08/19 10:35
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-11
Matrix: Solid
Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.011	J	0.039	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Naphthalene	0.013	J	0.039	0.0061	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Phenanthrene	0.18		0.039	0.0055	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1
Pyrene	0.079		0.039	0.0078	mg/Kg	☼	05/17/19 18:15	05/20/19 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*31 - 143*	*05/17/19 18:15*	*05/20/19 18:53*	*1*
2-Fluorobiphenyl	*73*		*43 - 145*	*05/17/19 18:15*	*05/20/19 18:53*	*1*
2-Fluorophenol	*74*		*31 - 166*	*05/17/19 18:15*	*05/20/19 18:53*	*1*
Nitrobenzene-d5	*51*		*37 - 147*	*05/17/19 18:15*	*05/20/19 18:53*	*1*
Phenol-d5	*63*		*30 - 153*	*05/17/19 18:15*	*05/20/19 18:53*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/17/19 18:15*	*05/20/19 18:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.1	0.22	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Arsenic	6.6		0.57	0.19	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Barium	34		0.57	0.065	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Beryllium	0.57		0.23	0.053	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Boron	14		2.8	0.27	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Cadmium	0.21		0.11	0.020	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Calcium	86000	B	57	9.6	mg/Kg	☼	05/15/19 17:36	05/17/19 12:46	5
Chromium	19		0.57	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Cobalt	12		0.28	0.075	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Copper	22		0.57	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Iron	17000	B	11	5.9	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Lead	12		0.28	0.13	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Magnesium	46000		28	14	mg/Kg	☼	05/15/19 17:36	05/17/19 12:46	5
Manganese	570		0.57	0.082	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Nickel	50		0.57	0.17	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Potassium	3000		28	10	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Selenium	0.57		0.57	0.33	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Silver	1.7		0.28	0.073	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Sodium	220		57	8.4	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Thallium	0.56	J	0.57	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Vanadium	18		0.28	0.067	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1
Zinc	47		1.1	0.50	mg/Kg	☼	05/15/19 17:36	05/16/19 21:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/20/19 07:23	05/20/19 19:18	1
Barium	<0.50		0.50	0.050	mg/L		05/20/19 07:23	05/20/19 19:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 19:18	1
Boron	<0.10		0.10	0.050	mg/L		05/20/19 07:23	05/20/19 19:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-3
Date Collected: 05/08/19 10:35
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-11
Matrix: Solid
Percent Solids: 83.2

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 19:18	1
Calcium	**14**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:18	1
Cobalt	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:18	1
Iron	**0.86**		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 19:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 19:18	1
Manganese	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:18	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:18	1
Potassium	**2.0**	**J**	2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:18	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 19:18	1
Silver	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:18	1
Zinc	<0.50	^	0.50	0.020	mg/L		05/20/19 07:23	05/20/19 19:18	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 01:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 01:40	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/21/19 09:55	05/22/19 08:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.018	0.0060	mg/Kg	☼	05/20/19 15:15	05/21/19 08:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/21/19 17:10	05/22/19 10:50	1
pH	**8.7**		0.2	0.2	SU			05/15/19 16:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-3 Dup
Date Collected: 05/08/19 10:40
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-12
Matrix: Solid
Percent Solids: 83.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/09/19 17:24	05/20/19 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/09/19 17:24*	*05/20/19 12:41*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/09/19 17:24*	*05/20/19 12:41*	*1*
Dibromofluoromethane	*90*		*75 - 126*	*05/09/19 17:24*	*05/20/19 12:41*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/09/19 17:24*	*05/20/19 12:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1

Client Sample ID: 2686V2-7-B06-3 Dup
Date Collected: 05/08/19 10:40
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-12
Matrix: Solid
Percent Solids: 83.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2-Methylnaphthalene	**0.017**	**J**	0.079	0.0072	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Acenaphthene	**0.013**	**J**	0.039	0.0070	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Acenaphthylene	**0.0083**	**J**	0.039	0.0051	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Anthracene	**0.053**		0.039	0.0065	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Benzo[a]anthracene	**0.054**		0.039	0.0052	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Benzo[a]pyrene	**0.040**		0.039	0.0075	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Benzo[b]fluoranthene	**0.057**		0.039	0.0084	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Benzo[g,h,i]perylene	**0.023**	**J**	0.039	0.013	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Benzo[k]fluoranthene	**0.018**	**J**	0.039	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Chrysene	**0.064**		0.039	0.011	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Dibenz(a,h)anthracene	**0.012**	**J**	0.039	0.0075	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Di-n-octyl phthalate	**0.079**	**J**	0.20	0.064	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Fluoranthene	**0.19**		0.039	0.0072	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Fluorene	**0.034**	**J**	0.039	0.0055	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-3 Dup
Date Collected: 05/08/19 10:40
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-12
Matrix: Solid
Percent Solids: 83.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.022	J	0.039	0.010	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Naphthalene	0.016	J	0.039	0.0060	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Phenanthrene	0.28		0.039	0.0054	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1
Pyrene	0.14		0.039	0.0077	mg/Kg	☼	05/17/19 18:15	05/20/19 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*31 - 143*	*05/17/19 18:15*	*05/20/19 19:22*	*1*
2-Fluorobiphenyl	*71*		*43 - 145*	*05/17/19 18:15*	*05/20/19 19:22*	*1*
2-Fluorophenol	*68*		*31 - 166*	*05/17/19 18:15*	*05/20/19 19:22*	*1*
Nitrobenzene-d5	*51*		*37 - 147*	*05/17/19 18:15*	*05/20/19 19:22*	*1*
Phenol-d5	*52*		*30 - 153*	*05/17/19 18:15*	*05/20/19 19:22*	*1*
Terphenyl-d14	*88*		*42 - 157*	*05/17/19 18:15*	*05/20/19 19:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.1	0.22	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Arsenic	4.7		0.55	0.19	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Barium	44		0.55	0.063	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Beryllium	0.67		0.22	0.052	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Boron	15		2.8	0.26	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Cadmium	0.23		0.11	0.020	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Calcium	71000	B	55	9.4	mg/Kg	☼	05/15/19 17:36	05/17/19 12:50	5
Chromium	21		0.55	0.27	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Cobalt	12		0.28	0.073	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Copper	21		0.55	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Iron	18000	B	11	5.8	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Lead	12		0.28	0.13	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Magnesium	30000		5.5	2.7	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Manganese	390		0.55	0.080	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Nickel	32		0.55	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Potassium	3400		28	9.8	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Selenium	0.48	J	0.55	0.33	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Silver	2.0		0.28	0.072	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Sodium	240		55	8.2	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Thallium	0.70		0.55	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Vanadium	21		0.28	0.065	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1
Zinc	50		1.1	0.49	mg/Kg	☼	05/15/19 17:36	05/16/19 21:21	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/20/19 07:23	05/20/19 19:30	1
Barium	<0.50		0.50	0.050	mg/L		05/20/19 07:23	05/20/19 19:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 19:30	1
Boron	0.071	J	0.10	0.050	mg/L		05/20/19 07:23	05/20/19 19:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B06-3 Dup
Date Collected: 05/08/19 10:40
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-12
Matrix: Solid
Percent Solids: 83.4

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 19:30	1
Calcium	**15**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:30	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:30	1
Cobalt	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:30	1
Iron	**1.5**		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 19:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 19:30	1
Manganese	**0.016**	**J**	0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:30	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:30	1
Potassium	**2.7**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:30	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 19:30	1
Silver	<0.025		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:30	1
Zinc	**0.093**	**J B ^**	0.50	0.020	mg/L		05/20/19 07:23	05/20/19 19:30	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 01:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 01:45	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/21/19 09:55	05/22/19 08:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0059	mg/Kg	☼	05/20/19 15:15	05/21/19 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	05/21/19 17:10	05/22/19 10:51	1
pH	**8.5**		0.2	0.2	SU			05/15/19 16:29	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B09
Date Collected: 05/08/19 14:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-18
Matrix: Solid
Percent Solids: 85.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Methylene Chloride	**0.0015**	**J**	0.0037	0.0015	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/09/19 17:24	05/20/19 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/09/19 17:24*	*05/20/19 15:15*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 131*	*05/09/19 17:24*	*05/20/19 15:15*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/09/19 17:24*	*05/20/19 15:15*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/09/19 17:24*	*05/20/19 15:15*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Client Sample ID: 2686V2-7-B09
Date Collected: 05/08/19 14:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-18
Matrix: Solid
Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Benzo[a]anthracene	**0.015**	**J**	0.038	0.0051	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Benzo[a]pyrene	**0.012**	**J**	0.038	0.0074	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Benzo[b]fluoranthene	**0.018**	**J**	0.038	0.0082	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.038	0.012	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Chrysene	**0.023**	**J**	0.038	0.010	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Fluoranthene	**0.020**	**J**	0.038	0.0071	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1

Client Sample ID: 2686V2-7-B09
Date Collected: 05/08/19 14:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-18
Matrix: Solid
Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Phenanthrene	**0.017**	**J**	0.038	0.0053	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1
Pyrene	**0.023**	**J**	0.038	0.0076	mg/Kg	☼	05/17/19 18:15	05/22/19 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*31 - 143*	*05/17/19 18:15*	*05/22/19 13:21*	*1*
2-Fluorobiphenyl	*64*		*43 - 145*	*05/17/19 18:15*	*05/22/19 13:21*	*1*
2-Fluorophenol	*63*		*31 - 166*	*05/17/19 18:15*	*05/22/19 13:21*	*1*
Nitrobenzene-d5	*58*		*37 - 147*	*05/17/19 18:15*	*05/22/19 13:21*	*1*
Phenol-d5	*66*		*30 - 153*	*05/17/19 18:15*	*05/22/19 13:21*	*1*
Terphenyl-d14	*85*		*42 - 157*	*05/17/19 18:15*	*05/22/19 13:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.60**	**J**	1.1	0.22	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Arsenic	**4.9**		0.57	0.20	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Barium	**41**		0.57	0.065	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Beryllium	**0.75**		0.23	0.053	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Boron	**15**		2.9	0.27	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Cadmium	**0.27**		0.11	0.021	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Calcium	**68000**	**B**	57	9.7	mg/Kg	☼	05/15/19 17:36	05/17/19 13:22	5
Chromium	**20**		0.57	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Cobalt	**11**		0.29	0.075	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Copper	**22**		0.57	0.16	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Iron	**19000**	**B**	11	5.9	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Lead	**11**		0.29	0.13	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Magnesium	**29000**		5.7	2.8	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Manganese	**370**		0.57	0.083	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Nickel	**33**		0.57	0.17	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Potassium	**3700**		29	10	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Selenium	**0.47**	**J**	0.57	0.34	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Silver	**2.5**		0.29	0.074	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Sodium	**640**		57	8.4	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Thallium	**0.76**		0.57	0.28	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Vanadium	**23**		0.29	0.067	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1
Zinc	**56**		1.1	0.50	mg/Kg	☼	05/15/19 17:36	05/16/19 21:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/20/19 07:26	05/21/19 00:09	1
Chromium	<0.025		0.025	0.010	mg/L		05/20/19 07:26	05/21/19 00:09	1
Iron	<0.40		0.40	0.20	mg/L		05/20/19 07:26	05/21/19 00:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/20/19 07:26	05/21/19 00:09	1

Client Sample ID: 2686V2-7-B09

Date Collected: 05/08/19 14:05
Date Received: 05/09/19 11:35

Lab Sample ID: 500-163058-18

Matrix: Solid
Percent Solids: 85.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.85**		0.025	0.010	mg/L		05/20/19 07:26	05/21/19 00:09	1
Nickel	<0.025		0.025	0.010	mg/L		05/20/19 07:26	05/21/19 00:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.047**	**J**	0.050	0.010	mg/L		05/20/19 07:23	05/20/19 19:54	1
Barium	**0.44**	**J**	0.50	0.050	mg/L		05/20/19 07:23	05/20/19 19:54	1
Beryllium	**0.0069**		0.0040	0.0040	mg/L		05/20/19 07:23	05/20/19 19:54	1
Boron	**0.20**		0.10	0.050	mg/L		05/20/19 07:23	05/20/19 19:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/20/19 07:23	05/20/19 19:54	1
Calcium	**81**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:54	1
Chromium	**0.17**		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:54	1
Cobalt	**0.058**		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:54	1
Iron	**150**		0.40	0.20	mg/L		05/20/19 07:23	05/20/19 19:54	1
Lead	**0.092**		0.0075	0.0075	mg/L		05/20/19 07:23	05/20/19 19:54	1
Manganese	**0.78**		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:54	1
Nickel	**0.20**		0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:54	1
Potassium	**36**		2.5	0.50	mg/L		05/20/19 07:23	05/20/19 19:54	1
Selenium	<0.050		0.050	0.020	mg/L		05/20/19 07:23	05/20/19 19:54	1
Silver	**0.013**	**J**	0.025	0.010	mg/L		05/20/19 07:23	05/20/19 19:54	1
Zinc	**0.54**	**B**	0.50	0.020	mg/L		05/20/19 07:23	05/21/19 12:49	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/20/19 07:26	05/21/19 12:33	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/20/19 07:23	05/21/19 02:17	1
Thallium	**0.0022**		0.0020	0.0020	mg/L		05/20/19 07:23	05/21/19 02:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00042**		0.00033	0.00033	mg/L		05/21/19 09:55	05/22/19 08:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.018	0.0060	mg/Kg	☼	05/20/19 15:15	05/21/19 08:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/21/19 17:10	05/22/19 10:53	1
pH	**8.6**		0.2	0.2	SU			05/15/19 16:43	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163058-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	Project Name: ~~FAP 346, Lake County~~	COC No.:
Andrews Engineering, Ir 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com 500-163058 COC	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project No.: PTB 184-006/~~AE~~ 018A TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other Sampler: WILLIAM LEWICKI	1 of 2 Lab Job No.: 500-163058 Sample Temp: 4/1.8/2.4

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	2686V2-7-B11-1	5-8-19	0905	S	X	X					X	X	X	X	X					
2	2686V-2-7-B11-2		0910																	
3	2686V-2-7-B04-1		1315																	
4	2686V-2-7-B04-2		1325																	
5	2686V2-7-B04-3		1335																	
6	2686V2-7-B05-1		1145																	
7	2686V2-7-B05-2		1150																	
8	2686V2-7-B05-3		1200																	
9	2686V2-7-B06-1		1000																	
10	2686V2-7-B06-2		1005																	
11	2686V2-7-B06-3		1035																	
12	2686V2-7-B06-3DUP		1040	S	X	X					X	X	X	X	X					

Relinquished by:	Date/Time 5/9/19 10:40 RW	Received by: Y. Neal	Date/Time 5/9/19 1040
Relinquished by: Y. Neal	Date/Time 5/9/19 1135	Received by:	Date/Time 5/9/19 1135
Relinquished by:	Date/Time	Received by:	Date/Time

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: ~~FAP 344 [illegible] County~~ Project No.: PTB 184-006/~~[illegible]~~018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: Will Ulewicz

COC No.: 2 of 2

Lab Job No.: 500-163058

Sample Temp: 4, 0.8, 2.4

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
13	2686V2-7-B07-1	5-8-19	1105	S	X	X					X	X	X	X	X					
14	2686V2-7-B07-2	↓	1115	↓	↓	↓					↓	↓	↓	↓	↓					
15	2686V2-7-B07-3		1125																	
16	2686V2-7-B08-1		1425																	
17	2686V2-7-B08-2		1430																	
18	2686V2-7-B09	↓	1405																	
	~~2686V2-7-B~~																			
	~~2686V2-7-B~~																			
	~~2686V2-7-B~~																			
	~~2686V2-7-B~~																			
	~~2686V2-7-B~~			↓																
19	Trip Blank #3	5/8/19		S	X															

Relinquished by:	Date/Time 5/9/19 1040	Received by:	Date/Time 5/9/19 1040
Relinquished by:	Date/Time 5/9/19 1135	Received by:	Date/Time 5/9/19 1135
Relinquished by:	Date/Time	Received by:	Date/Time

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163559-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/30/2019 5:24:10 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686v2-7-B10
Date Collected: 05/16/19 08:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163559-1
Matrix: Solid
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Acetone	**0.14**		0.015	0.0066	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Trichloroethene	**0.00082**	**J**	0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/25/19 19:29*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/25/19 19:29*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/17/19 18:04*	*05/25/19 19:29*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/17/19 18:04*	*05/25/19 19:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1

Client Sample ID: 2686v2-7-B10
Date Collected: 05/16/19 08:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163559-1
Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2-Methylnaphthalene	**0.0071**	**J**	0.075	0.0068	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Chrysene	**0.028**	**J**	0.037	0.010	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163559-1

Client Sample ID: 2686v2-7-B10
Date Collected: 05/16/19 08:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163559-1
Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Phenanthrene	**0.043**		0.037	0.0052	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1
Pyrene	**0.018**	**J**	0.037	0.0074	mg/Kg	☼	05/22/19 15:55	05/23/19 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*31 - 143*	*05/22/19 15:55*	*05/23/19 15:22*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/22/19 15:55*	*05/23/19 15:22*	*1*
2-Fluorophenol	*88*		*31 - 166*	*05/22/19 15:55*	*05/23/19 15:22*	*1*
Nitrobenzene-d5	*75*		*37 - 147*	*05/22/19 15:55*	*05/23/19 15:22*	*1*
Phenol-d5	*95*		*30 - 153*	*05/22/19 15:55*	*05/23/19 15:22*	*1*
Terphenyl-d14	*100*		*42 - 157*	*05/22/19 15:55*	*05/23/19 15:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Arsenic	**5.5**		0.55	0.19	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Barium	**40**		0.55	0.063	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Beryllium	**0.67**		0.22	0.051	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Boron	**18**		2.8	0.26	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Cadmium	**0.52**	**B**	0.11	0.020	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Calcium	**72000**	**B**	55	9.3	mg/Kg	☼	05/23/19 16:45	05/28/19 16:00	5
Chromium	**19**		0.55	0.27	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Cobalt	**12**		0.28	0.072	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Copper	**20**		0.55	0.15	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Iron	**17000**		11	5.7	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Magnesium	**31000**		5.5	2.7	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Manganese	**400**		0.55	0.080	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Nickel	**33**		0.55	0.16	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Potassium	**3400**		28	9.7	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/23/19 16:45	05/28/19 15:56	1
Silver	**2.4**		0.28	0.071	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Sodium	**200**		55	8.2	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Thallium	**0.99**		0.55	0.27	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Vanadium	**22**		0.28	0.065	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1
Zinc	**97**		1.1	0.48	mg/Kg	☼	05/23/19 16:45	05/25/19 02:56	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/28/19 14:37	05/29/19 17:10	1
Barium	<0.50		0.50	0.050	mg/L		05/28/19 14:37	05/29/19 17:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/28/19 14:37	05/29/19 17:10	1
Boron	<0.10		0.10	0.050	mg/L		05/28/19 14:37	05/29/19 17:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163559-1

Client Sample ID: 2686v2-7-B10
Date Collected: 05/16/19 08:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163559-1
Matrix: Solid
Percent Solids: 85.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/28/19 14:37	05/29/19 17:10	1
Calcium	**110**		2.5	0.50	mg/L		05/28/19 14:37	05/29/19 17:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:10	1
Cobalt	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:10	1
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:37	05/29/19 17:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:37	05/29/19 17:10	1
Manganese	**0.041**		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:10	1
Nickel	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:10	1
Potassium	**2.1**	**J**	2.5	0.50	mg/L		05/28/19 14:37	05/29/19 17:10	1
Selenium	<0.050		0.050	0.020	mg/L		05/28/19 14:37	05/29/19 17:10	1
Silver	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:10	1
Zinc	<0.50		0.50	0.020	mg/L		05/28/19 14:37	05/29/19 17:10	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/28/19 14:37	05/30/19 13:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/28/19 14:37	05/30/19 13:27	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 07:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.017	0.0058	mg/Kg	☼	05/28/19 15:10	05/29/19 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53	F1 F2	0.53	0.18	mg/Kg	☼	05/29/19 14:30	05/29/19 18:59	1
pH	**7.9**		0.2	0.2	SU			05/23/19 17:18	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163559-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163559-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact

Andrews Engineering, Inc
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

500-163559 COC

Laboratory

Lab: **Test America - Chicago**
Address: **2417 Bond Street**
University Park, IL 60484
Phone: **708-534-5200**
Contact: **Dick Wright**
email: richard.wright@testamericainc.com

Project Name: ~~FAP 340, Kane County~~ ✓
Project No.: PTB 184-006 / ~~AE~~ 018A
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other
Sampler: William Ulewicz

COC No.: 1 of 1
Lab Job No.: 500-163559
Sample Temp: 3.4

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
					ANALYSES															
1	2686V2-7-B10	5-16	0820	S	X	X					X	X	X	X	X					
	~~2686V2-7-B13~~			↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 5/16/19 1435	Received by:	Date/Time 5/16/19 1435
Relinquished by:	Date/Time 5/17/19 9:50	Received by:	Date/Time 5/17/19 0950
Relinquished by:	Date/Time 5/17/19 1115	Received by:	Date/Time 5/17/19 1115

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):
291-535 West Deerpath Road, 365 Ahwahnee Lane, and 386 Ahwahnee Road

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24771 (Decimal Degrees) Longitude: -87.85631 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 635

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24771 Longitude: - 87.85631

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-9-B01 THROUGH -B04 WERE SAMPLED ADJACENT TO SITE 2686V2-9. SEE TABLE 3f AND FIGURE 5 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID: 500-163607-3

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.				
Street Address:	420 Eisenhower Lane North				
City:	Lombard	State:	IL	Zip Code:	60148
Phone:	630-953-3332				

Savo Radulovic
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

P.E or L.P.G. Seal:

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-9

Residences

Sample ID	2686V2-9-B01-1	2686V2-9-B01-2	2686V2-9-B01-2 DUP	2686V2-9-B02-1	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-6	6-12	6-12	0-6					
Sample Date	5/17/2019	5/17/2019	5/17/2019	5/17/2019	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
PID	0	0	0	0					
Sample pH	8.6	8	7.9	8.5					
Matrix	Soil	Soil	Soil	Soil					
No Contaminants of Concern Noted.									

Sample ID	2686V2-9-B02-2	2686V2-9-B03	2686V2-9-B04	**Maximum Allowable Concentration**				
Sample Depth (ft)	6-12	0-8	0-8					
Sample Date	5/17/2019	5/17/2019	5/17/2019	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
PID	0	0	0					
Sample pH	7.9	8.2	8.1					
Matrix	Soil	Soil	Soil					
No Contaminants of Concern Noted.								

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163607-3
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
6/5/2019 6:02:27 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-1
Date Collected: 05/17/19 07:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-9
Matrix: Solid
Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/17/19 18:04*	*05/28/19 18:37*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/28/19 18:37*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/28/19 18:37*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/17/19 18:04*	*05/28/19 18:37*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-1
Date Collected: 05/17/19 07:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-9
Matrix: Solid
Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Hexachlorocyclopentadiene	<0.75	*	0.75	0.21	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-1
Date Collected: 05/17/19 07:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-9
Matrix: Solid
Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/29/19 18:32	05/30/19 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*52*		*31 - 143*	*05/29/19 18:32*	*05/30/19 17:14*	*1*
2-Fluorobiphenyl	*58*		*43 - 145*	*05/29/19 18:32*	*05/30/19 17:14*	*1*
2-Fluorophenol	*75*		*31 - 166*	*05/29/19 18:32*	*05/30/19 17:14*	*1*
Nitrobenzene-d5	*56*		*37 - 147*	*05/29/19 18:32*	*05/30/19 17:14*	*1*
Phenol-d5	*69*		*30 - 153*	*05/29/19 18:32*	*05/30/19 17:14*	*1*
Terphenyl-d14	*69*		*42 - 157*	*05/29/19 18:32*	*05/30/19 17:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.46**	**J**	1.1	0.21	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Arsenic	**5.8**		0.55	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Barium	**49**		0.55	0.063	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Beryllium	**0.74**		0.22	0.051	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Boron	**15**		2.7	0.26	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Cadmium	**0.18**	**B**	0.11	0.020	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Calcium	**77000**		55	9.3	mg/Kg	☼	05/24/19 17:11	05/29/19 10:46	5
Chromium	**18**	**B**	0.55	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Cobalt	**14**		0.27	0.072	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Copper	**19**		0.55	0.15	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Iron	**18000**	**B**	11	5.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Lead	**14**		0.27	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 10:42	1
Magnesium	**39000**		27	14	mg/Kg	☼	05/24/19 17:11	05/29/19 10:46	5
Manganese	**430**	**B**	0.55	0.080	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Nickel	**32**		0.55	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Potassium	**3200**		27	9.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Silver	**2.2**		0.27	0.071	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Sodium	**290**		55	8.1	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Thallium	**1.7**		0.55	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Vanadium	**22**		0.27	0.065	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1
Zinc	**53**		1.1	0.48	mg/Kg	☼	05/24/19 17:11	05/28/19 18:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/04/19 09:30	06/04/19 15:15	1
Chromium	<0.025		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:15	1
Iron	<0.40		0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:15	1

Client Sample ID: 2686V2-9-B01-1

Date Collected: 05/17/19 07:45
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-9

Matrix: Solid
Percent Solids: 87.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.34**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.043**	**J**	0.050	0.010	mg/L		05/30/19 14:31	05/31/19 10:31	1
Barium	**0.36**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 10:31	1
Beryllium	**0.0049**		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 10:31	1
Boron	**0.22**		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 10:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 10:31	1
Calcium	**32**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:31	1
Chromium	**0.13**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:31	1
Cobalt	**0.028**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:31	1
Iron	**100**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 10:31	1
Lead	**0.055**		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 10:31	1
Manganese	**0.35**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:31	1
Nickel	**0.10**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:31	1
Potassium	**35**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:31	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 10:31	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:31	1
Zinc	**0.30**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 10:31	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/04/19 09:30	06/04/19 18:37	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 17:51	1
Thallium	**0.0023**		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 17:51	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/31/19 10:05	06/03/19 09:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0060	mg/Kg	☼	05/29/19 14:40	05/30/19 08:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.16	mg/Kg	☼	05/31/19 11:00	05/31/19 15:11	1
pH	**8.6**		0.2	0.2	SU			05/24/19 17:04	1

Client Sample ID: 2686V2-9-B01-2
Date Collected: 05/17/19 07:50
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-10
Matrix: Solid
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Acetone	**0.030**		0.015	0.0067	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Methylene Chloride	**0.0017**	**J**	0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*	*05/17/19 18:04*	*05/28/19 19:02*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/17/19 18:04*	*05/28/19 19:02*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/17/19 18:04*	*05/28/19 19:02*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/17/19 18:04*	*05/28/19 19:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1

Client Sample ID: 2686V2-9-B01-2
Date Collected: 05/17/19 07:50
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-10
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2-Methylnaphthalene	**0.011**	**J**	0.076	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1

Client Sample ID: 2686V2-9-B01-2
Date Collected: 05/17/19 07:50
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-10
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Naphthalene	**0.0072**	**J**	0.037	0.0058	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Phenanthrene	**0.030**	**J**	0.037	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1
Pyrene	**0.0094**	**J**	0.037	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*57*		*31 - 143*	*05/29/19 18:32*	*05/30/19 17:43*	*1*
2-Fluorobiphenyl	*60*		*43 - 145*	*05/29/19 18:32*	*05/30/19 17:43*	*1*
2-Fluorophenol	*76*		*31 - 166*	*05/29/19 18:32*	*05/30/19 17:43*	*1*
Nitrobenzene-d5	*57*		*37 - 147*	*05/29/19 18:32*	*05/30/19 17:43*	*1*
Phenol-d5	*70*		*30 - 153*	*05/29/19 18:32*	*05/30/19 17:43*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 18:32*	*05/30/19 17:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.52**	**J**	1.1	0.21	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Arsenic	**9.7**		0.54	0.18	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Barium	**35**		0.54	0.061	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Beryllium	**0.68**		0.21	0.050	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Boron	**14**		2.7	0.25	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Cadmium	**0.18**	**B**	0.11	0.019	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Calcium	**62000**		54	9.1	mg/Kg	☼	05/24/19 17:11	05/29/19 11:06	5
Chromium	**17**	**B**	0.54	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Cobalt	**12**		0.27	0.070	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Copper	**29**		0.54	0.15	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Iron	**20000**	**B**	11	5.6	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Lead	**19**		0.27	0.12	mg/Kg	☼	05/24/19 17:11	05/29/19 10:50	1
Magnesium	**28000**		5.4	2.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Manganese	**410**	**B**	0.54	0.078	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Nickel	**34**		0.54	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Potassium	**3000**		27	9.5	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Silver	**2.1**		0.27	0.069	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Sodium	**240**		54	8.0	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Thallium	**1.7**		0.54	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Vanadium	**20**		0.27	0.063	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1
Zinc	**60**		1.1	0.47	mg/Kg	☼	05/24/19 17:11	05/28/19 18:29	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 10:35	1
Barium	<0.50		0.50	0.050	mg/L		05/30/19 14:31	05/31/19 10:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 10:35	1
Boron	<0.10		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 10:35	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-2
Date Collected: 05/17/19 07:50
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-10
Matrix: Solid
Percent Solids: 86.9

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 10:35	1
Calcium	**14**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:35	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:35	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:35	1
Iron	**0.42**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 10:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 10:35	1
Manganese	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:35	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:35	1
Potassium	**1.2**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 10:35	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 10:35	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 10:35	1
Zinc	<0.50		0.50	0.020	mg/L		05/30/19 14:31	05/31/19 10:35	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 18:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 18:04	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0062	mg/Kg	☼	05/29/19 14:40	05/30/19 08:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	05/31/19 11:00	05/31/19 15:11	1
pH	**8.0**		0.2	0.2	SU			05/24/19 17:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-2 Dup
Date Collected: 05/17/19 07:55
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-11
Matrix: Solid
Percent Solids: 87.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/17/19 18:04*	*05/28/19 19:28*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/28/19 19:28*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/17/19 18:04*	*05/28/19 19:28*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/17/19 18:04*	*05/28/19 19:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1

Client Sample ID: 2686V2-9-B01-2 Dup

Date Collected: 05/17/19 07:55
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-11

Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Chrysene	**0.016**	**J**	0.037	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Fluoranthene	**0.011**	**J**	0.037	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-2 Dup

Date Collected: 05/17/19 07:55
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-11

Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Phenanthrene	**0.031**	**J**	0.037	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1
Pyrene	**0.013**	**J**	0.037	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*62*		*31 - 143*	*05/29/19 18:32*	*05/30/19 18:12*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*05/29/19 18:32*	*05/30/19 18:12*	*1*
2-Fluorophenol	*78*		*31 - 166*	*05/29/19 18:32*	*05/30/19 18:12*	*1*
Nitrobenzene-d5	*59*		*37 - 147*	*05/29/19 18:32*	*05/30/19 18:12*	*1*
Phenol-d5	*74*		*30 - 153*	*05/29/19 18:32*	*05/30/19 18:12*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 18:32*	*05/30/19 18:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.50**	**J**	1.1	0.21	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Arsenic	**8.0**		0.55	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Barium	**32**		0.55	0.062	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Beryllium	**0.63**		0.22	0.051	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Boron	**15**		2.7	0.25	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Cadmium	**0.22**	**B**	0.11	0.020	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Calcium	**70000**		55	9.3	mg/Kg	☼	05/24/19 17:11	05/29/19 11:14	5
Chromium	**17**	**B**	0.55	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Cobalt	**8.5**		0.27	0.072	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Copper	**22**		0.55	0.15	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Iron	**18000**	**B**	11	5.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Lead	**12**		0.27	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 11:10	1
Magnesium	**31000**		5.5	2.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Manganese	**350**	**B**	0.55	0.079	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Nickel	**26**		0.55	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Potassium	**3000**		27	9.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Silver	**2.1**		0.27	0.070	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Sodium	**230**		55	8.1	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Thallium	**1.9**		0.55	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Vanadium	**20**		0.27	0.064	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1
Zinc	**63**		1.1	0.48	mg/Kg	☼	05/24/19 17:11	05/28/19 18:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 11:18	1
Barium	<0.50		0.50	0.050	mg/L		05/30/19 14:31	05/31/19 11:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 11:18	1
Boron	<0.10		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 11:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B01-2 Dup
Date Collected: 05/17/19 07:55
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-11
Matrix: Solid
Percent Solids: 87.4

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 11:18	1
Calcium	**14**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:18	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:18	1
Iron	**0.84**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 11:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 11:18	1
Manganese	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:18	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:18	1
Potassium	**1.6**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:18	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 11:18	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:18	1
Zinc	**0.24**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 11:18	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 18:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 18:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 09:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0062	mg/Kg	☼	05/29/19 14:40	05/30/19 09:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.39		0.39	0.14	mg/Kg	☼	05/31/19 11:00	05/31/19 15:12	1
pH	**7.9**		0.2	0.2	SU			05/24/19 17:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-1
Date Collected: 05/17/19 08:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-12
Matrix: Solid
Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Acetone	**0.021**		0.016	0.0071	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Methylene Chloride	**0.0019**	**J**	0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/28/19 19:53*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/17/19 18:04*	*05/28/19 19:53*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/17/19 18:04*	*05/28/19 19:53*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/17/19 18:04*	*05/28/19 19:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-1
Date Collected: 05/17/19 08:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-12
Matrix: Solid
Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachlorocyclopentadiene	<0.79	*	0.79	0.23	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-1
Date Collected: 05/17/19 08:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-12
Matrix: Solid
Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/29/19 18:32	05/30/19 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
2-Fluorobiphenyl	*62*		*43 - 145*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
2-Fluorophenol	*80*		*31 - 166*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
Phenol-d5	*75*		*30 - 153*	*05/29/19 18:32*	*05/30/19 18:41*	*1*
Terphenyl-d14	*79*		*42 - 157*	*05/29/19 18:32*	*05/30/19 18:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.50**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Arsenic	**5.7**		0.56	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Barium	**59**		0.56	0.063	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Beryllium	**0.86**		0.22	0.052	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Cadmium	**0.17**	**B**	0.11	0.020	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Calcium	**62000**		56	9.4	mg/Kg	☼	05/24/19 17:11	05/29/19 11:22	5
Chromium	**22**	**B**	0.56	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Cobalt	**12**		0.28	0.073	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Copper	**20**		0.56	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Iron	**20000**	**B**	11	5.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Lead	**12**		0.28	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 11:18	1
Magnesium	**27000**		5.6	2.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Manganese	**430**	**B**	0.56	0.081	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Nickel	**33**		0.56	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Potassium	**3600**		28	9.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Silver	**2.6**		0.28	0.072	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Sodium	**210**		56	8.2	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Thallium	**2.0**		0.56	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Vanadium	**25**		0.28	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1
Zinc	**60**		1.1	0.49	mg/Kg	☼	05/24/19 17:11	05/28/19 18:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		06/04/19 09:30	06/04/19 15:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/04/19 09:30	06/04/19 15:20	1
Chromium	<0.025		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:20	1
Iron	**0.22**	**J**	0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:20	1

Client Sample ID: 2686V2-9-B02-1
Date Collected: 05/17/19 08:00
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-12
Matrix: Solid
Percent Solids: 83.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:20	1
Manganese	**0.083**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:20	1
Nickel	<0.025		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:20	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.064**		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 11:22	1
Barium	**0.59**		0.50	0.050	mg/L		05/30/19 14:31	05/31/19 11:22	1
Beryllium	**0.0073**		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 11:22	1
Boron	**0.22**		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 11:22	1
Cadmium	**0.0020**	**J**	0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 11:22	1
Calcium	**46**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:22	1
Chromium	**0.19**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:22	1
Cobalt	**0.044**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:22	1
Iron	**170**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 11:22	1
Lead	**0.080**		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 11:22	1
Manganese	**0.60**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:22	1
Nickel	**0.17**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:22	1
Potassium	**39**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:22	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 11:22	1
Silver	**0.012**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:22	1
Zinc	**0.40**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 11:22	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/04/19 09:30	06/04/19 18:41	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 18:12	1
Thallium	**0.0035**		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 18:12	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/31/19 10:05	06/03/19 09:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0058	mg/Kg	☼	05/29/19 14:40	05/30/19 09:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	05/31/19 11:00	05/31/19 15:13	1
pH	**8.5**		0.2	0.2	SU			05/24/19 17:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-2
Date Collected: 05/17/19 08:05
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-13
Matrix: Solid
Percent Solids: 86.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/17/19 18:04	05/29/19 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/29/19 12:25*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/29/19 12:25*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/29/19 12:25*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/17/19 18:04*	*05/29/19 12:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-2
Date Collected: 05/17/19 08:05
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-13
Matrix: Solid
Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-2
Date Collected: 05/17/19 08:05
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-13
Matrix: Solid
Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Phenanthrene	**0.012**	**J**	0.038	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
2-Fluorobiphenyl	*63*		*43 - 145*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
2-Fluorophenol	*81*		*31 - 166*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
Nitrobenzene-d5	*59*		*37 - 147*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
Phenol-d5	*76*		*30 - 153*	*05/29/19 18:32*	*05/30/19 19:09*	*1*
Terphenyl-d14	*76*		*42 - 157*	*05/29/19 18:32*	*05/30/19 19:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.56**	**J**	1.1	0.22	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Arsenic	**5.7**		0.56	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Barium	**46**		0.56	0.064	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Beryllium	**0.74**		0.23	0.053	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Boron	**18**		2.8	0.26	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Cadmium	**0.13**	**B**	0.11	0.020	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Calcium	**78000**		56	9.5	mg/Kg	☼	05/24/19 17:11	05/29/19 11:30	5
Chromium	**19**	**B**	0.56	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Cobalt	**14**		0.28	0.074	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Copper	**20**		0.56	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Iron	**18000**	**B**	11	5.9	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Lead	**12**		0.28	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 11:26	1
Magnesium	**32000**		5.6	2.8	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Manganese	**440**	**B**	0.56	0.082	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Nickel	**32**		0.56	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Potassium	**3800**		28	10	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Silver	**1.9**		0.28	0.073	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Sodium	**220**		56	8.3	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Thallium	**1.6**		0.56	0.28	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Vanadium	**22**		0.28	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1
Zinc	**56**		1.1	0.49	mg/Kg	☼	05/24/19 17:11	05/28/19 18:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/19 14:31	05/31/19 11:26	1
Barium	<0.50		0.50	0.050	mg/L		05/30/19 14:31	05/31/19 11:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 11:26	1
Boron	<0.10		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 11:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B02-2
Date Collected: 05/17/19 08:05
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-13
Matrix: Solid
Percent Solids: 86.7

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 11:26	1
Calcium	**94**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:26	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:26	1
Cobalt	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:26	1
Iron	<0.40		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 11:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 11:26	1
Manganese	**0.056**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:26	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:26	1
Potassium	**1.9**	**J**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:26	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 11:26	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:26	1
Zinc	**0.14**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 11:26	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 18:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 18:16	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/19 10:05	06/03/19 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0060	mg/Kg	☼	05/29/19 14:40	05/30/19 09:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.16	mg/Kg	☼	05/31/19 11:00	05/31/19 15:13	1
pH	**7.9**		0.2	0.2	SU			05/24/19 17:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B03
Date Collected: 05/17/19 08:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-14
Matrix: Solid
Percent Solids: 85.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Acetone	**0.018**		0.017	0.0075	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/17/19 18:04	05/29/19 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/29/19 12:51*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/17/19 18:04*	*05/29/19 12:51*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/29/19 12:51*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/17/19 18:04*	*05/29/19 12:51*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B03
Date Collected: 05/17/19 08:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-14
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Hexachlorocyclopentadiene	<0.76	*	0.76	0.22	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B03
Date Collected: 05/17/19 08:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-14
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*48*		*31 - 143*	*05/29/19 18:32*	*05/30/19 19:38*	*1*
2-Fluorobiphenyl	*58*		*43 - 145*	*05/29/19 18:32*	*05/30/19 19:38*	*1*
2-Fluorophenol	*75*		*31 - 166*	*05/29/19 18:32*	*05/30/19 19:38*	*1*
Nitrobenzene-d5	*55*		*37 - 147*	*05/29/19 18:32*	*05/30/19 19:38*	*1*
Phenol-d5	*68*		*30 - 153*	*05/29/19 18:32*	*05/30/19 19:38*	*1*
Terphenyl-d14	*69*		*42 - 157*	*05/29/19 18:32*	*05/30/19 19:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.57**	**J**	1.1	0.21	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Arsenic	**6.8**		0.55	0.19	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Barium	**50**		0.55	0.062	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Beryllium	**0.77**		0.22	0.051	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Boron	**16**		2.7	0.26	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Cadmium	**0.18**	**B**	0.11	0.020	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Calcium	**65000**		55	9.3	mg/Kg	☼	05/24/19 17:11	05/29/19 11:38	5
Chromium	**19**	**B**	0.55	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Cobalt	**15**		0.27	0.072	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Copper	**21**		0.55	0.15	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Iron	**20000**	**B**	11	5.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Lead	**13**		0.27	0.13	mg/Kg	☼	05/24/19 17:11	05/29/19 11:34	1
Magnesium	**30000**		5.5	2.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Manganese	**620**	**B**	0.55	0.079	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Nickel	**36**		0.55	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Potassium	**3800**		27	9.7	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Silver	**2.3**		0.27	0.071	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Sodium	**250**		55	8.1	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Thallium	**2.1**		0.55	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Vanadium	**22**		0.27	0.065	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1
Zinc	**60**		1.1	0.48	mg/Kg	☼	05/24/19 17:11	05/28/19 18:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:24	1
Manganese	**2.1**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:24	1

Client Sample ID: 2686V2-9-B03
Date Collected: 05/17/19 08:15
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-14
Matrix: Solid
Percent Solids: 85.5

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.014**	**J**	0.050	0.010	mg/L		05/30/19 14:31	05/31/19 11:30	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 11:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 11:30	1
Boron	**0.12**		0.10	0.050	mg/L		05/30/19 14:31	05/31/19 11:30	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 11:30	1
Calcium	**22**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:30	1
Chromium	**0.061**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:30	1
Cobalt	**0.016**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:30	1
Iron	**47**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 11:30	1
Lead	**0.030**		0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 11:30	1
Manganese	**0.30**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:30	1
Nickel	**0.052**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:30	1
Potassium	**19**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:30	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/19 14:31	05/31/19 11:30	1
Silver	<0.025		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:30	1
Zinc	**0.22**	**J**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 11:30	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 18:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 18:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/31/19 10:05	06/03/19 09:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0062	mg/Kg	☼	05/29/19 14:40	05/30/19 09:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/31/19 11:00	05/31/19 15:13	1
pH	**8.2**		0.2	0.2	SU			05/24/19 17:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Client Sample ID: 2686V2-9-B04
Date Collected: 05/17/19 08:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-15
Matrix: Solid
Percent Solids: 78.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Acetone	**0.021**		0.019	0.0082	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Chloroethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Methylene Chloride	**0.0021**	**J B**	0.0047	0.0019	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	05/17/19 18:04	05/29/19 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/17/19 18:04*	*05/29/19 13:16*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/29/19 13:16*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/17/19 18:04*	*05/29/19 13:16*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/17/19 18:04*	*05/29/19 13:16*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1

Client Sample ID: 2686V2-9-B04
Date Collected: 05/17/19 08:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-15
Matrix: Solid
Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Benzo[a]anthracene	**0.019**	**J**	0.040	0.0055	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Benzo[a]pyrene	**0.024**	**J**	0.040	0.0079	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Benzo[b]fluoranthene	**0.036**	**J**	0.040	0.0088	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Benzo[k]fluoranthene	**0.013**	**J**	0.040	0.012	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Chrysene	**0.025**	**J**	0.040	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Di-n-octyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Fluoranthene	**0.040**		0.040	0.0076	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Hexachlorocyclopentadiene	<0.82	*	0.82	0.23	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1

Client Sample ID: 2686V2-9-B04
Date Collected: 05/17/19 08:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-15
Matrix: Solid
Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.012	J	0.040	0.011	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Phenanthrene	0.017	J	0.040	0.0057	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Phenol	<0.20		0.20	0.091	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1
Pyrene	0.033	J	0.040	0.0081	mg/Kg	☼	05/29/19 18:32	05/30/19 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*58*		*31 - 143*	*05/29/19 18:32*	*05/30/19 20:07*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 18:32*	*05/30/19 20:07*	*1*
2-Fluorophenol	*74*		*31 - 166*	*05/29/19 18:32*	*05/30/19 20:07*	*1*
Nitrobenzene-d5	*51*		*37 - 147*	*05/29/19 18:32*	*05/30/19 20:07*	*1*
Phenol-d5	*70*		*30 - 153*	*05/29/19 18:32*	*05/30/19 20:07*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 18:32*	*05/30/19 20:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.2	0.23	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Arsenic	4.0		0.58	0.20	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Barium	76		0.58	0.066	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Beryllium	0.91		0.23	0.054	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Boron	9.4		2.9	0.27	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Cadmium	0.33	B	0.12	0.021	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Calcium	6900		12	2.0	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Chromium	23	B	0.58	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Cobalt	10		0.29	0.076	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Copper	26		0.58	0.16	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Iron	17000	B	12	6.0	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Lead	40		0.29	0.13	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Magnesium	5800		5.8	2.9	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Manganese	200	B	0.58	0.084	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Nickel	32		0.58	0.17	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Potassium	2400		29	10	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Selenium	0.37	J	0.58	0.34	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Silver	3.4		0.29	0.075	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Sodium	780		58	8.6	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Thallium	2.6		0.58	0.29	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Vanadium	26		0.29	0.068	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1
Zinc	85		1.2	0.51	mg/Kg	☼	05/24/19 17:11	05/28/19 19:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/04/19 09:30	06/04/19 15:28	1
Chromium	<0.025		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:28	1
Iron	0.27	J	0.40	0.20	mg/L		06/04/19 09:30	06/04/19 15:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		06/04/19 09:30	06/04/19 15:28	1

Client Sample ID: 2686V2-9-B04

Date Collected: 05/17/19 08:30
Date Received: 05/17/19 16:17

Lab Sample ID: 500-163607-15

Matrix: Solid
Percent Solids: 78.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.39**		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:28	1
Nickel	<0.025		0.025	0.010	mg/L		06/04/19 09:30	06/04/19 15:28	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.039**	**J F1**	0.050	0.010	mg/L		05/30/19 14:31	05/31/19 11:34	1
Barium	**0.76**	**F1**	0.50	0.050	mg/L		05/30/19 14:31	05/31/19 11:34	1
Beryllium	**0.0089**		0.0040	0.0040	mg/L		05/30/19 14:31	05/31/19 11:34	1
Boron	**0.21**	**F1**	0.10	0.050	mg/L		05/30/19 14:31	05/31/19 11:34	1
Cadmium	**0.0028**	**J**	0.0050	0.0020	mg/L		05/30/19 14:31	05/31/19 11:34	1
Calcium	**34**	**F1**	2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:34	1
Chromium	**0.25**	**F1**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:34	1
Cobalt	**0.064**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:34	1
Iron	**170**		0.40	0.20	mg/L		05/30/19 14:31	05/31/19 11:34	1
Lead	**0.15**	**F1**	0.0075	0.0075	mg/L		05/30/19 14:31	05/31/19 11:34	1
Manganese	**0.81**	**F1**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:34	1
Nickel	**0.21**		0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:34	1
Potassium	**33**		2.5	0.50	mg/L		05/30/19 14:31	05/31/19 11:34	1
Selenium	<0.050	F1	0.050	0.020	mg/L		05/30/19 14:31	05/31/19 11:34	1
Silver	**0.015**	**J**	0.025	0.010	mg/L		05/30/19 14:31	05/31/19 11:34	1
Zinc	**0.62**	**F1**	0.50	0.020	mg/L		05/30/19 14:31	05/31/19 11:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		06/04/19 09:30	06/04/19 18:45	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		05/30/19 14:31	05/31/19 18:25	1
Thallium	**0.0035**	**F1**	0.0020	0.0020	mg/L		05/30/19 14:31	05/31/19 18:25	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/31/19 10:05	06/03/19 09:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.067**		0.021	0.0068	mg/Kg	☼	05/29/19 14:40	05/30/19 09:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.21	mg/Kg	☼	05/31/19 11:00	05/31/19 15:14	1
pH	**8.1**		0.2	0.2	SU			05/24/19 17:04	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163607-3

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	06-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: ~~[illegible]~~ Project No.: PTB 184-006/~~AE7~~-018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: William Ulewicz

COC No.: 1 of 1

Lab Job No.: 500-163607

Sample Temp: 2.6, 4.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:

W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
9	2686V2-9-1301-1	5-17	0745	S	X	X					X	X	X	X	X					
10	2686V2-9-1301-2		0750																	
11	2686V2-9-1301-2 DUP		0755																	
12	2686V2-9-1302-1		0800																	
13	2686V2-9-1302-2		0805																	
14	2686V2-9-1303		0815																	
15	2686V2-9-1304		0830																	

Relinquished by:	Date/Time 5/17/19 3:10	Received by:	Date/Time 5/17/19 1610
Relinquished by:	Date/Time 5/17/19 1617	Received by:	Date/Time 5/17/19 1617
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 346 (Deerpath Road) Office Phone Number, if available:

Physical Site Location (address, including number and street):
500 West Deerpath Road

City: Lake Forest State: IL Zip Code: 60045

County: Cook Township: Shields

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.24902 (Decimal Degrees) Longitude: -87.85834 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: 0970800006 BOW: BOA:

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 45,818

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 346 (Deerpath Road) Latitude: 42.24902 Longitude: - 87.85834

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2686V2-10-B01, -B02, -B03, -B05 THROUGH -B20, -B22, -B23, AND -B25 THROUGH -B37 WERE SAMPLED ADJACENT TO SITE 2686V2-10. SEE TABLE 3g AND FIGURES 3, 4, 5, 6, 8, 9, AND 10 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-163564-1, 500-163561-1, AND 500-162990-1

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Andrews Engineering, Inc.
Street Address:	420 Eisenhower Lane North
City:	Lombard State: IL Zip Code: 60148
Phone:	630-953-3332

Savo Radulovic
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Jul 15, 2019
Date:

P.E or L.P.G. Seal:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

Semivolatile Organic Compounds (mg/kg)
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

ISGS Site 2686V2-10
Deerpath Golf Course

Sample ID	2686V2-10-B01	2686V2-10-B02	2686V2-10-B03	2686V2-10-B05	2686V2-10-B06	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-5	0-8	0-8	0-2	0-2					
Sample Date	5/6/2019	5/6/2019	5/6/2019	5/7/2019	5/7/2019					
PID	0	0	0	0	0					
Sample pH	7.8	8.1	8.5	8.8	8.8	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	ND	ND	**J 0.026**	**0.36** **1,2**	0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)										
Arsenic	**4.2**	**8.1**	**4.7**	**6.6**	**11**	11.3	--	11.3	--	13

Sample ID	2686V2-10-B07-1	2686V2-10-B07-2	2686V2-10-B07-2 DUP	2686V2-10-B08-1	2686V2-10-B08-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-5	5-10	5-10	0-5	5-10					
Sample Date	5/16/2019	5/16/2019	5/16/2019	5/16/2019	5/16/2019					
PID	0	0	0	0	0					
Sample pH	8.4	8.6	8.5	8.5	8.6	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	ND	ND	ND	ND	0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)										
Arsenic	**2.8**	**3.6**	**7.5**	**5.4**	**3.4**	11.3	--	11.3	--	13

Sample ID	2686V2-10-B09-1	2686V2-10-B09-2	2686V2-10-B10-1	2686V2-10-B10-2	2686V2-10-B10-2 DUP	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-6	6-12	0-8	8-16	0-6					
Sample Date	5/16/2019	5/16/2019	5/16/2019	5/16/2019	5/16/2019					
PID	0	0	0	0	0					
Sample pH	8.4	8.1	8.8	8.1	8.4	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	ND	ND	ND	ND	0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)										
Arsenic	**4.5**	**3.9**	**4.1**	**6.3**	**4.9**	11.3	--	11.3	--	13

Sample ID	2686V2-10-B11	2686V2-10-B12-1	2686V2-10-B12-2	2686V2-10-B13-1	2686V2-10-B13-2	**Maximum Allowable Concentration**				
Sample Depth (ft)	0-6	0-6	6-12	0-8	8-16					
Sample Date	5/16/2019	5/16/2019	5/16/2019	5/16/2019	5/16/2019					
PID	0	0	0	0	0					
Sample pH	8.8	8.4	8.2	8.8	8.5	[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil	Soil	Soil	Soil	Soil					
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	ND	ND	ND	**J 0.011**	0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)										
Arsenic	**4**	**5.1**	**2.4**	**3.6**	**6.3**	11.3	--	11.3	--	13

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Sample ID	2686V2-10-B14		2686V2-10-B15		2686V2-10-B16-1		2686V2-10-B16-2		2686V2-10-B17-1		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-5		0-7		0-7		7-14		0-7						
Sample Date	5/16/2019		5/16/2019		5/16/2019		5/16/2019		5/16/2019						
PID	0		0		0		0		0						
Sample pH	8.9		8.8		8.6		8.9		8.7						
Matrix	Soil		Soil		Soil		Soil		Soil		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**7.3**		**9.3**		**4.9**		**5.6**		**5.7**		11.3	--	11.3	--	13

Sample ID	2686V2-10-B17-1 DUP		2686V2-10-B17-2		2686V2-10-B18-1		2686V2-10-B18-2		2686V2-10-B19-1		**Maximum Allowable Concentration**				
Sample Depth (ft)	7-14		7-14		0-7		7-14		0-7.5						
Sample Date	5/16/2019		5/16/2019		5/6/2019		5/6/2019		5/6/2019						
PID	0		0		0		0		0						
Sample pH	8.7		9		7.9		8.2		8.4						
Matrix	Soil		Soil		Soil		Soil		Soil		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		**J 0.011**		**0.23**	**1,2**	ND		**J 0.01**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**4.5**		**5.1**		**5**		**2.8**		**3.4**		11.3	--	11.3	--	13

Sample ID	2686V2-10-B19-2		2686V2-10-B20-1		2686V2-10-B20-2		2686V2-10-B22-1		2686V2-10-B22-2		**Maximum Allowable Concentration**				
Sample Depth (ft)	7.5-15		0-8		8-14		0-7		7-14						
Sample Date	5/6/2019		5/6/2019		5/6/2019		5/6/2019		5/6/2019						
PID	0		0		0		0		0						
Sample pH	8.4		8.6		8.1		8.6		8						
Matrix	Soil		Soil		Soil		Soil		Soil		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**4.2**		**7.1**		**5.6**		**4.8**		**5.1**		11.3	--	11.3	--	13

Sample ID	2686V2-10-B22-2 DUP		2686V2-10-B23-1		2686V2-10-B23-2		2686V2-10-B25		2686V2-10-B26		**Maximum Allowable Concentration**				
Sample Depth (ft)	7-14		0-7		7-14		0-8		0-7						
Sample Date	5/6/2019		5/6/2019		5/6/2019		5/6/2019		5/6/2019						
PID	0		0		0		0		0						
Sample pH	7.9		7.9		8.2		8.4		8.1						
Matrix	Soil		Soil		Soil		Soil		Soil		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**4.5**		**7.1**		**4.4**		**5**		**5.8**		11.3	--	11.3	--	13

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Sample ID	2686V2-10-B27-1		2686V2-10-B27-2		2686V2-10-B28-1		2686V2-10-B28-2		2686V2-10-B28-2 DUP		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-6		6-12		0-6		6-12		6-12						
Sample Date	5/7/2019		5/7/2019		5/7/2019		5/7/2019		5/7/2019						
PID	0		0		0		0		0						
Sample pH	8.4		8.7		8.2		8.7		8.7		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		**J 0.027**		ND		ND		**J 0.026**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**4.1**		**5.7**		**6.7**		**3.6**		**4.4**		11.3	--	11.3	--	13

Sample ID	2686V2-10-B29-1		2686V2-10-B29-2		2686V2-10-B30-1		2686V2-10-B30-2		2686V2-10-B31-1		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-6		6-12		0-7.5		7.5-15		0-7.5						
Sample Date	5/7/2019		5/7/2019		5/7/2019		5/7/2019		5/7/2019						
PID	0		0		0		0		0						
Sample pH	8.7		8.6		8.7		8.7		8.8		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		**J 0.026**		ND		ND		ND		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**2.7**		**5.9**		**6.7**		**6.9**		**7.3**		11.3	--	11.3	--	13

Sample ID	2686V2-10-B31-2		2686V2-10-B32-1		2686V2-10-B32-2		2686V2-10-B33-1		2686V2-10-B33-2		**Maximum Allowable Concentration**				
Sample Depth (ft)	7.5-15		0-7.5		7.5-15		0-7.5		7.5-15						
Sample Date	5/7/2019		5/7/2019		5/7/2019		5/7/2019		5/7/2019						
PID	0		0		0		0		0						
Sample pH	8.7		8.6		8.4		8.5		8.3		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		**J 0.025**		ND		ND		**J 0.0075**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**6.7**		**13**	**1,3**	**4**		**6.7**		**5.8**		11.3	--	11.3	--	13

Sample ID	2686V2-10-B33-2 DUP		2686V2-10-B34-1		2686V2-10-B34-2		2686V2-10-B35-1		2686V2-10-B35-2		**Maximum Allowable Concentration**				
Sample Depth (ft)	7.5-15		0-7.5		7.5-15		0-6.5		6.5-13						
Sample Date	5/7/2019		5/7/2019		5/7/2019		5/7/2019		5/7/2019						
PID	0		0		0		0		0						
Sample pH	8.3		8.6		8.3		8.5		8.1		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	ND		ND		ND		**J 0.026**		**J 0.024**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)															
Arsenic	**7**		**5.6**		**6.1**		**4.6**		**7**		11.3	--	11.3	--	13

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Deerpath Golf Course

Sample ID	2686V2-10-B36		2686V2-10-B37-1		2686V2-10-B37-2		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-8		0-6.5		6.5-13						
Sample Date	5/7/2019		5/7/2019		5/7/2019						
PID	0		0		0						
Sample pH	8.5		8.5		8.2						
Matrix	Soil		Soil		Soil		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	ND		**J 0.027**		**J 0.026**		0.09	0.09	0.98	1.3	2.1
Inorganic Compounds, Total (mg/kg)											
Arsenic	**6**		**8**		**5.2**		11.3	--	11.3	--	13

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163564-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
6/3/2019 7:55:04 AM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B01
Date Collected: 05/16/19 08:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-1
Matrix: Solid
Percent Solids: 85.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/17/19 18:04*	*05/28/19 14:24*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*05/17/19 18:04*	*05/28/19 14:24*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/17/19 18:04*	*05/28/19 14:24*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/17/19 18:04*	*05/28/19 14:24*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B01
Date Collected: 05/16/19 08:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-1
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,4-Dimethylphenol	<0.37	*	0.37	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1

Client Sample ID: 2686V2-10-B01
Date Collected: 05/16/19 08:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-1
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Isophorone	<0.19	*	0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Pentachlorophenol	<0.75	*	0.75	0.60	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Phenanthrene	**0.015**	**J**	0.037	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*31 - 143*	*05/29/19 19:59*	*05/30/19 16:54*	*1*
2-Fluorobiphenyl	*54*		*43 - 145*	*05/29/19 19:59*	*05/30/19 16:54*	*1*
2-Fluorophenol	*49*		*31 - 166*	*05/29/19 19:59*	*05/30/19 16:54*	*1*
Nitrobenzene-d5	*34*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 16:54*	*1*
Phenol-d5	*49*		*30 - 153*	*05/29/19 19:59*	*05/30/19 16:54*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 19:59*	*05/30/19 16:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.1**		1.1	0.21	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Arsenic	**4.2**		0.55	0.19	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Barium	**45**		0.55	0.063	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Beryllium	**0.72**		0.22	0.052	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Boron	**17**		2.8	0.26	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Cadmium	**0.24**		0.11	0.020	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Calcium	**65000**	**B**	55	9.3	mg/Kg	☼	05/28/19 09:00	05/29/19 14:45	5
Chromium	**19**	**^**	0.55	0.27	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Cobalt	**11**		0.28	0.072	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Copper	**19**		0.55	0.15	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Iron	**17000**		11	5.7	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Lead	**9.5**		0.28	0.13	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Magnesium	**31000**	**B**	5.5	2.7	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Manganese	**410**		0.55	0.080	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Nickel	**30**		0.55	0.16	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Potassium	**3700**		28	9.8	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Selenium	**0.51**	**J**	0.55	0.32	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Silver	**2.2**	**B**	0.28	0.071	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Sodium	**260**		55	8.2	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Thallium	**0.54**	**J**	0.55	0.28	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Vanadium	**23**		0.28	0.065	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1
Zinc	**52**	**B**	1.1	0.48	mg/Kg	☼	05/28/19 09:00	05/28/19 23:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 09:55	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 14:46	05/30/19 09:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 09:55	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 09:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B01
Date Collected: 05/16/19 08:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-1
Matrix: Solid
Percent Solids: 85.5

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 09:55	1
Calcium	**110**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 09:55	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:55	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:55	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 09:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 09:55	1
Manganese	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:55	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:55	1
Potassium	**1.2**	**J**	2.5	0.50	mg/L		05/29/19 14:46	05/30/19 09:55	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 09:55	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:55	1
Zinc	**0.29**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 09:55	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:04	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.019	0.0063	mg/Kg	☼	05/29/19 14:40	05/30/19 10:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.36		0.36	0.12	mg/Kg	☼	05/29/19 23:30	05/30/19 12:38	1
pH	**7.8**		0.2	0.2	SU			05/23/19 17:16	1

Client Sample ID: 2686V2-10-B02
Date Collected: 05/16/19 08:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-2
Matrix: Solid
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Acetone	**0.0084**	**J**	0.015	0.0067	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Bromomethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 14:49*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/17/19 18:04*	*05/28/19 14:49*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/17/19 18:04*	*05/28/19 14:49*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/28/19 14:49*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1

Client Sample ID: 2686V2-10-B02
Date Collected: 05/16/19 08:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-2
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,4-Dimethylphenol	<0.38	*	0.38	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1

Client Sample ID: 2686V2-10-B02
Date Collected: 05/16/19 08:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-2
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Isophorone	<0.19	*	0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Pentachlorophenol	<0.77	*	0.77	0.61	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1
Pyrene	**0.011**	**J**	0.038	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*31 - 143*	*05/29/19 19:59*	*05/30/19 17:18*	*1*
2-Fluorobiphenyl	*50*		*43 - 145*	*05/29/19 19:59*	*05/30/19 17:18*	*1*
2-Fluorophenol	*52*		*31 - 166*	*05/29/19 19:59*	*05/30/19 17:18*	*1*
Nitrobenzene-d5	*37*		*37 - 147*	*05/29/19 19:59*	*05/30/19 17:18*	*1*
Phenol-d5	*48*		*30 - 153*	*05/29/19 19:59*	*05/30/19 17:18*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/29/19 19:59*	*05/30/19 17:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.97**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Arsenic	**8.1**		0.57	0.19	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Barium	**38**		0.57	0.065	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Beryllium	**0.71**		0.23	0.053	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Boron	**17**		2.9	0.27	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Cadmium	**0.25**		0.11	0.021	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Calcium	**71000**	**B**	57	9.7	mg/Kg	☼	05/28/19 09:00	05/29/19 14:49	5
Chromium	**18**	**^**	0.57	0.28	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Cobalt	**11**		0.29	0.075	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Copper	**20**		0.57	0.16	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Iron	**17000**		11	5.9	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Magnesium	**42000**	**B**	29	14	mg/Kg	☼	05/28/19 09:00	05/29/19 14:49	5
Manganese	**460**		0.57	0.083	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Nickel	**29**		0.57	0.17	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Potassium	**3700**		29	10	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Silver	**2.3**	**B**	0.29	0.074	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Sodium	**220**		57	8.4	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Thallium	**0.66**		0.57	0.28	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Vanadium	**22**		0.29	0.067	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1
Zinc	**55**	**B**	1.1	0.50	mg/Kg	☼	05/28/19 09:00	05/28/19 23:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.35**		0.20	0.20	mg/L		05/29/19 14:48	05/30/19 10:18	1

Client Sample ID: 2686V2-10-B02

Date Collected: 05/16/19 08:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-2

Matrix: Solid
Percent Solids: 85.9

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 09:59	1
Barium	**0.051**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 09:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 09:59	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 09:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 09:59	1
Calcium	**12**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 09:59	1
Chromium	**0.016**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:59	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:59	1
Iron	**8.7**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 09:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 09:59	1
Manganese	**0.046**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:59	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:59	1
Potassium	**5.6**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 09:59	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 09:59	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 09:59	1
Zinc	**0.036**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 09:59	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0060	mg/Kg	☼	05/29/19 14:40	05/30/19 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.36		0.36	0.13	mg/Kg	☼	05/29/19 23:30	05/30/19 12:38	1
pH	**8.1**		0.2	0.2	SU			05/23/19 17:22	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B03
Date Collected: 05/16/19 08:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-3
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*05/17/19 18:04*	*05/28/19 15:15*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*05/17/19 18:04*	*05/28/19 15:15*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/28/19 15:15*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 15:15*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1

Client Sample ID: 2686V2-10-B03
Date Collected: 05/16/19 08:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-3
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,4-Dimethylphenol	<0.38	*	0.38	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Fluoranthene	**0.0080**	**J**	0.038	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1

Client Sample ID: 2686V2-10-B03
Date Collected: 05/16/19 08:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-3
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Isophorone	<0.19	*	0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Pentachlorophenol	<0.77	*	0.77	0.62	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Phenanthrene	**0.0062**	**J**	0.038	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1
Pyrene	**0.0079**	**J**	0.038	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*31 - 143*	*05/29/19 19:59*	*05/30/19 11:20*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 19:59*	*05/30/19 11:20*	*1*
2-Fluorophenol	*52*		*31 - 166*	*05/29/19 19:59*	*05/30/19 11:20*	*1*
Nitrobenzene-d5	*42*		*37 - 147*	*05/29/19 19:59*	*05/30/19 11:20*	*1*
Phenol-d5	*52*		*30 - 153*	*05/29/19 19:59*	*05/30/19 11:20*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 19:59*	*05/30/19 11:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.94**	**J**	1.2	0.23	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Arsenic	**4.7**		0.58	0.20	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Barium	**46**		0.58	0.066	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Beryllium	**0.84**		0.23	0.054	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Boron	**18**		2.9	0.27	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Cadmium	**0.24**		0.12	0.021	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Calcium	**58000**	**B**	58	9.8	mg/Kg	☼	05/28/19 09:00	05/29/19 14:53	5
Chromium	**22**	**^**	0.58	0.29	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Cobalt	**12**		0.29	0.076	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Copper	**19**		0.58	0.16	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Iron	**20000**		12	6.0	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Lead	**13**		0.29	0.13	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Magnesium	**28000**	**B**	5.8	2.9	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Manganese	**300**		0.58	0.084	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Nickel	**32**		0.58	0.17	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Potassium	**4100**		29	10	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Selenium	**0.46**	**J**	0.58	0.34	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Silver	**2.8**	**B**	0.29	0.075	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Sodium	**420**		58	8.6	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Thallium	**1.1**		0.58	0.29	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Vanadium	**28**		0.29	0.068	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1
Zinc	**58**	**B**	1.2	0.51	mg/Kg	☼	05/28/19 09:00	05/28/19 23:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 10:23	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:23	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:23	1

Client Sample ID: 2686V2-10-B03
Date Collected: 05/16/19 08:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-3
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.64**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:23	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:23	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.044**	**J**	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:03	1
Barium	**0.49**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:03	1
Beryllium	**0.0080**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:03	1
Boron	**0.26**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:03	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:03	1
Calcium	**45**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:03	1
Chromium	**0.18**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:03	1
Cobalt	**0.045**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:03	1
Iron	**150**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:03	1
Lead	**0.092**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:03	1
Manganese	**0.53**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:03	1
Nickel	**0.16**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:03	1
Potassium	**46**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:03	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:03	1
Silver	**0.011**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:03	1
Zinc	**0.37**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:03	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:48	05/31/19 13:07	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:12	1
Thallium	**0.0023**		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:12	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.018	0.0060	mg/Kg	☼	05/29/19 14:40	05/30/19 10:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	05/29/19 23:30	05/30/19 12:39	1
pH	**8.5**		0.2	0.2	SU			05/23/19 17:29	1

Client Sample ID: 2686V2-10-B18-1

Date Collected: 05/16/19 09:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-4

Matrix: Solid
Percent Solids: 76.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Acetone	**0.0096**	**J**	0.020	0.0089	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Bromodichloromethane	<0.0020		0.0020	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Bromoform	<0.0020		0.0020	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Ethylbenzene	<0.0020		0.0020	0.00098	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Methylene Chloride	**0.0024**	**J**	0.0051	0.0020	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Styrene	<0.0020		0.0020	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	05/17/19 18:04	05/28/19 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/17/19 18:04*	*05/28/19 15:41*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*05/17/19 18:04*	*05/28/19 15:41*	*1*
Dibromofluoromethane	*99*		*75 - 126*	*05/17/19 18:04*	*05/28/19 15:41*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 15:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
1,4-Dichlorobenzene	<0.22		0.22	0.056	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1

Client Sample ID: 2686V2-10-B18-1
Date Collected: 05/16/19 09:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-4
Matrix: Solid
Percent Solids: 76.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.43		0.43	0.099	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,4-Dimethylphenol	<0.43	*	0.43	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,4-Dinitrophenol	<0.87		0.87	0.76	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,4-Dinitrotoluene	<0.22		0.22	0.069	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2-Chlorophenol	<0.22		0.22	0.074	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2-Methylnaphthalene	<0.087		0.087	0.0080	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4,6-Dinitro-2-methylphenol	<0.87		0.87	0.35	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4-Chloroaniline	<0.87		0.87	0.20	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
4-Nitrophenol	<0.87		0.87	0.41	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Acenaphthene	**0.020**	**J**	0.043	0.0078	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Acenaphthylene	**0.0097**	**J**	0.043	0.0057	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Anthracene	**0.053**		0.043	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Benzo[a]anthracene	**0.22**		0.043	0.0058	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Benzo[a]pyrene	**0.23**		0.043	0.0084	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Benzo[b]fluoranthene	**0.34**		0.043	0.0093	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Benzo[g,h,i]perylene	**0.14**		0.043	0.014	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Benzo[k]fluoranthene	**0.13**		0.043	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Chrysene	**0.30**		0.043	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Dibenz(a,h)anthracene	**0.046**		0.043	0.0084	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Dimethyl phthalate	<0.22		0.22	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Di-n-octyl phthalate	<0.22		0.22	0.071	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Fluoranthene	**0.57**		0.043	0.0080	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Fluorene	**0.027**	**J**	0.043	0.0061	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Hexachlorobenzene	<0.087		0.087	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Hexachlorocyclopentadiene	<0.87		0.87	0.25	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Hexachloroethane	<0.22		0.22	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1

Client Sample ID: 2686V2-10-B18-1

Date Collected: 05/16/19 09:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-4

Matrix: Solid
Percent Solids: 76.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.13**		0.043	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Isophorone	<0.22	*	0.22	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Naphthalene	<0.043		0.043	0.0067	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
N-Nitrosodi-n-propylamine	<0.087		0.087	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Pentachlorophenol	<0.87	*	0.87	0.69	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Phenanthrene	**0.40**		0.043	0.0060	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Phenol	<0.22		0.22	0.096	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1
Pyrene	**0.47**		0.043	0.0086	mg/Kg	☼	05/29/19 19:59	05/30/19 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*05/29/19 19:59*	*05/30/19 11:44*	*1*
2-Fluorobiphenyl	*48*		*43 - 145*	*05/29/19 19:59*	*05/30/19 11:44*	*1*
2-Fluorophenol	*48*		*31 - 166*	*05/29/19 19:59*	*05/30/19 11:44*	*1*
Nitrobenzene-d5	*36*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 11:44*	*1*
Phenol-d5	*50*		*30 - 153*	*05/29/19 19:59*	*05/30/19 11:44*	*1*
Terphenyl-d14	*69*		*42 - 157*	*05/29/19 19:59*	*05/30/19 11:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.64**	**J**	1.2	0.23	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Arsenic	**5.0**		0.60	0.21	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Barium	**64**		0.60	0.069	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Beryllium	**0.92**		0.24	0.056	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Boron	**12**		3.0	0.28	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Cadmium	**0.30**		0.12	0.022	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Calcium	**2900**	**B**	12	2.0	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Chromium	**25**	**^**	0.60	0.30	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Cobalt	**11**		0.30	0.079	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Copper	**17**		0.60	0.17	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Iron	**26000**		12	6.3	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Lead	**15**		0.30	0.14	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Magnesium	**5400**	**B**	6.0	3.0	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Manganese	**570**		0.60	0.087	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Nickel	**32**		0.60	0.17	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Potassium	**3500**		30	11	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Selenium	**0.44**	**J**	0.60	0.35	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Silver	**3.4**	**B**	0.30	0.078	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Sodium	**190**		60	8.9	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Thallium	**1.0**		0.60	0.30	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Vanadium	**31**		0.30	0.071	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1
Zinc	**85**	**B**	1.2	0.53	mg/Kg	☼	05/28/19 09:00	05/28/19 23:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 10:27	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:27	1
Iron	**0.26**	**J**	0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:27	1

Client Sample ID: 2686V2-10-B18-1

Date Collected: 05/16/19 09:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-4

Matrix: Solid
Percent Solids: 76.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.1		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:27	1
Nickel	0.011	J	0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.034	J	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:07	1
Barium	0.59		0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:07	1
Beryllium	0.0092		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:07	1
Boron	0.25		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:07	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:07	1
Calcium	23		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:07	1
Chromium	0.24		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:07	1
Cobalt	0.054		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:07	1
Iron	190		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:07	1
Lead	0.10		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:07	1
Manganese	1.1		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:07	1
Nickel	0.20		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:07	1
Potassium	47		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:07	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:07	1
Silver	0.014	J	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:07	1
Zinc	0.80		0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:48	05/31/19 13:11	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:17	1
Thallium	0.0027		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.053		0.021	0.0071	mg/Kg	☼	05/29/19 14:40	05/30/19 10:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.62		0.62	0.21	mg/Kg	☼	05/30/19 11:00	05/30/19 17:13	1
pH	7.9		0.2	0.2	SU			05/23/19 17:35	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B18-2
Date Collected: 05/16/19 09:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-5
Matrix: Solid
Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Acetone	**0.020**		0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Methylene Chloride	**0.0016**	**J**	0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*05/17/19 18:04*	*05/28/19 16:07*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*05/17/19 18:04*	*05/28/19 16:07*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/17/19 18:04*	*05/28/19 16:07*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 16:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1

Client Sample ID: 2686V2-10-B18-2

Date Collected: 05/16/19 09:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-5

Matrix: Solid
Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Chrysene	**0.018**	**J**	0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1

Client Sample ID: 2686V2-10-B18-2 **Lab Sample ID: 500-163564-5**
Date Collected: 05/16/19 09:20 **Matrix: Solid**
Date Received: 05/17/19 11:15 **Percent Solids: 83.6**

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Isophorone	<0.20	*	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Pentachlorophenol	<0.79	*	0.79	0.63	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Phenanthrene	**0.0072**	**J**	0.039	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1
Pyrene	**0.010**	**J**	0.039	0.0077	mg/Kg	☼	05/29/19 19:59	05/30/19 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*76*		*31 - 143*	*05/29/19 19:59*	*05/30/19 12:07*	*1*
2-Fluorobiphenyl	*53*		*43 - 145*	*05/29/19 19:59*	*05/30/19 12:07*	*1*
2-Fluorophenol	*44*		*31 - 166*	*05/29/19 19:59*	*05/30/19 12:07*	*1*
Nitrobenzene-d5	*34*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 12:07*	*1*
Phenol-d5	*47*		*30 - 153*	*05/29/19 19:59*	*05/30/19 12:07*	*1*
Terphenyl-d14	*66*		*42 - 157*	*05/29/19 19:59*	*05/30/19 12:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.71**	**J**	1.2	0.23	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Arsenic	**2.8**		0.59	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Barium	**43**		0.59	0.067	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Beryllium	**0.74**		0.24	0.055	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Boron	**18**		2.9	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Cadmium	**0.27**		0.12	0.021	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Calcium	**63000**	**B**	59	10	mg/Kg	☼	05/28/19 09:00	05/29/19 14:57	5
Chromium	**21**		0.59	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Cobalt	**8.5**		0.29	0.077	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Copper	**17**		0.59	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Iron	**16000**		12	6.1	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Lead	**9.5**		0.29	0.14	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Magnesium	**31000**	**B**	5.9	2.9	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Manganese	**510**		0.59	0.085	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Nickel	**29**		0.59	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Potassium	**4000**		29	10	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Silver	**2.4**	**B**	0.29	0.076	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Sodium	**180**		59	8.7	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Thallium	**0.83**		0.59	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Vanadium	**21**		0.29	0.070	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1
Zinc	**60**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 09:00	05/29/19 00:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:31	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B18-2
Date Collected: 05/16/19 09:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-5
Matrix: Solid
Percent Solids: 83.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:11	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:11	1
Boron	**0.10**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:11	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:11	1
Calcium	**14**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:11	1
Chromium	**0.039**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:11	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:11	1
Iron	**24**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:11	1
Lead	**0.018**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:11	1
Manganese	**0.13**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:11	1
Nickel	**0.026**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:11	1
Potassium	**14**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:11	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:11	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:11	1
Zinc	**0.082**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:11	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0058	mg/Kg	☼	05/29/19 14:40	05/30/19 10:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/30/19 11:00	05/30/19 17:13	1
pH	**8.2**		0.2	0.2	SU			05/23/19 17:41	1

Client Sample ID: 2686V2-10-B19-1
Date Collected: 05/16/19 09:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-6
Matrix: Solid
Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Acetone	**0.012**	**J**	0.017	0.0073	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 16:33*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*05/17/19 18:04*	*05/28/19 16:33*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*05/17/19 18:04*	*05/28/19 16:33*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 16:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1

Client Sample ID: 2686V2-10-B19-1
Date Collected: 05/16/19 09:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-6
Matrix: Solid
Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Benzo[a]pyrene	**0.010**	**J**	0.039	0.0075	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Benzo[b]fluoranthene	**0.013**	**J**	0.039	0.0084	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Benzo[g,h,i]perylene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Fluoranthene	**0.014**	**J**	0.039	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Fluorene	<0.039		0.039	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B19-1
Date Collected: 05/16/19 09:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-6
Matrix: Solid
Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Isophorone	<0.19	*	0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Pentachlorophenol	<0.78	*	0.78	0.62	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Phenanthrene	**0.0067**	**J**	0.039	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1
Pyrene	**0.012**	**J**	0.039	0.0077	mg/Kg	☼	05/29/19 19:59	05/30/19 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*31 - 143*	*05/29/19 19:59*	*05/30/19 12:31*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 19:59*	*05/30/19 12:31*	*1*
2-Fluorophenol	*57*		*31 - 166*	*05/29/19 19:59*	*05/30/19 12:31*	*1*
Nitrobenzene-d5	*46*		*37 - 147*	*05/29/19 19:59*	*05/30/19 12:31*	*1*
Phenol-d5	*56*		*30 - 153*	*05/29/19 19:59*	*05/30/19 12:31*	*1*
Terphenyl-d14	*77*		*42 - 157*	*05/29/19 19:59*	*05/30/19 12:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.62**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Arsenic	**3.4**		0.57	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Barium	**37**		0.57	0.066	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Beryllium	**0.54**		0.23	0.054	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Boron	**11**		2.9	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Cadmium	**0.20**		0.11	0.021	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Calcium	**1800**	**B**	11	1.9	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Chromium	**18**		0.57	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Cobalt	**6.5**		0.29	0.075	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Copper	**17**		0.57	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Iron	**16000**		11	6.0	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Magnesium	**3700**	**B**	5.7	2.9	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Manganese	**230**		0.57	0.083	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Nickel	**22**		0.57	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Potassium	**2600**		29	10	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Silver	**2.4**	**B**	0.29	0.074	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Sodium	**490**		57	8.5	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Thallium	**0.93**		0.57	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Vanadium	**21**		0.29	0.068	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1
Zinc	**58**	**B**	1.1	0.50	mg/Kg	☼	05/28/19 09:00	05/29/19 00:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:48	05/30/19 10:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 10:35	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:35	1
Iron	**0.44**		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:35	1

Client Sample ID: 2686V2-10-B19-1

Date Collected: 05/16/19 09:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-6

Matrix: Solid
Percent Solids: 84.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:35	1
Manganese	**1.4**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:35	1
Nickel	**0.018**	**J**	0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:35	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.062**		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:15	1
Barium	**0.59**		0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:15	1
Beryllium	**0.011**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:15	1
Boron	**0.27**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:15	1
Cadmium	**0.0025**	**J**	0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:15	1
Calcium	**23**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:15	1
Chromium	**0.29**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:15	1
Cobalt	**0.064**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:15	1
Iron	**240**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:15	1
Lead	**0.13**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:15	1
Manganese	**1.0**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:15	1
Nickel	**0.28**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:15	1
Potassium	**55**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:15	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:15	1
Silver	**0.019**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:15	1
Zinc	**0.81**		0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:48	05/31/19 13:15	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:25	1
Thallium	**0.0042**		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:25	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00060**		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.019	0.0064	mg/Kg	☼	05/29/19 14:40	05/30/19 10:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	05/30/19 11:00	05/30/19 17:14	1
pH	**8.4**		0.2	0.2	SU			05/23/19 17:47	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B19-2
Date Collected: 05/16/19 09:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-7
Matrix: Solid
Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/17/19 18:04*	*05/28/19 16:58*	*1*
4-Bromofluorobenzene (Surr)	*113*		*75 - 131*	*05/17/19 18:04*	*05/28/19 16:58*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/28/19 16:58*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/17/19 18:04*	*05/28/19 16:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1

Client Sample ID: 2686V2-10-B19-2
Date Collected: 05/16/19 09:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-7
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,4-Dimethylphenol	<0.38	*	0.38	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Chrysene	**0.022**	**J**	0.038	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1

Client Sample ID: 2686V2-10-B19-2

Date Collected: 05/16/19 09:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-7

Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Isophorone	<0.19	*	0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Pentachlorophenol	<0.77	*	0.77	0.61	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Phenanthrene	**0.015**	**J**	0.038	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1
Pyrene	**0.0083**	**J**	0.038	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*31 - 143*	*05/29/19 19:59*	*05/30/19 17:42*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 19:59*	*05/30/19 17:42*	*1*
2-Fluorophenol	*57*		*31 - 166*	*05/29/19 19:59*	*05/30/19 17:42*	*1*
Nitrobenzene-d5	*38*		*37 - 147*	*05/29/19 19:59*	*05/30/19 17:42*	*1*
Phenol-d5	*53*		*30 - 153*	*05/29/19 19:59*	*05/30/19 17:42*	*1*
Terphenyl-d14	*60*		*42 - 157*	*05/29/19 19:59*	*05/30/19 17:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.91**	**J**	1.2	0.23	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Arsenic	**4.2**		0.60	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Barium	**53**		0.60	0.068	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Beryllium	**0.81**		0.24	0.056	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Boron	**20**		3.0	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Cadmium	**0.22**		0.12	0.021	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Calcium	**64000**	**B**	60	10	mg/Kg	☼	05/28/19 09:00	05/29/19 15:01	5
Chromium	**22**		0.60	0.30	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Cobalt	**21**		0.30	0.078	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Copper	**19**		0.60	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Iron	**18000**		12	6.2	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Lead	**11**		0.30	0.14	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Magnesium	**29000**	**B**	6.0	3.0	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Manganese	**440**		0.60	0.086	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Nickel	**31**		0.60	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Potassium	**4500**		30	11	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Silver	**2.6**	**B**	0.30	0.077	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Sodium	**230**		60	8.8	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Thallium	**0.79**		0.60	0.30	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Vanadium	**25**		0.30	0.070	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1
Zinc	**56**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 09:00	05/29/19 00:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 10:39	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:39	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:39	1

Client Sample ID: 2686V2-10-B19-2

Date Collected: 05/16/19 09:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-7

Matrix: Solid
Percent Solids: 83.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.1**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:39	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:39	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.036**	**J**	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:19	1
Barium	**0.42**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:19	1
Beryllium	**0.0067**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:19	1
Boron	**0.21**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:19	1
Cadmium	**0.0020**	**J**	0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:19	1
Calcium	**69**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:19	1
Chromium	**0.17**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:19	1
Cobalt	**0.033**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:19	1
Iron	**110**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:19	1
Lead	**0.065**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:19	1
Manganese	**0.59**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:19	1
Nickel	**0.14**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:19	1
Potassium	**39**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:19	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:19	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:19	1
Zinc	**0.38**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:19	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:29	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0061	mg/Kg	☼	05/29/19 14:40	05/30/19 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/30/19 11:00	05/30/19 17:15	1
pH	**8.4**		0.2	0.2	SU			05/23/19 17:53	1

Client Sample ID: 2686V2-10-B20-1

Date Collected: 05/16/19 09:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-8

Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Methylene Chloride	**0.0021**	**J**	0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/17/19 18:04*	*05/28/19 17:24*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*05/17/19 18:04*	*05/28/19 17:24*	*1*
Dibromofluoromethane	*99*		*75 - 126*	*05/17/19 18:04*	*05/28/19 17:24*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/28/19 17:24*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1

Client Sample ID: 2686V2-10-B20-1
Date Collected: 05/16/19 09:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-8
Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1

Client Sample ID: 2686V2-10-B20-1

Date Collected: 05/16/19 09:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-8

Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Isophorone	<0.20	*	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Pentachlorophenol	<0.79	*	0.79	0.63	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/29/19 19:59	05/30/19 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*31 - 143*	*05/29/19 19:59*	*05/30/19 12:55*	*1*
2-Fluorobiphenyl	*53*		*43 - 145*	*05/29/19 19:59*	*05/30/19 12:55*	*1*
2-Fluorophenol	*52*		*31 - 166*	*05/29/19 19:59*	*05/30/19 12:55*	*1*
Nitrobenzene-d5	*37*		*37 - 147*	*05/29/19 19:59*	*05/30/19 12:55*	*1*
Phenol-d5	*51*		*30 - 153*	*05/29/19 19:59*	*05/30/19 12:55*	*1*
Terphenyl-d14	*71*		*42 - 157*	*05/29/19 19:59*	*05/30/19 12:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.58**	**J F1**	1.2	0.23	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Arsenic	**7.1**	**F1 F2**	0.59	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Barium	**41**		0.59	0.068	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Beryllium	**0.48**		0.24	0.055	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Boron	**6.6**	**F1**	3.0	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Cadmium	**0.31**		0.12	0.021	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Calcium	**26000**	**F2 B**	12	2.0	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Chromium	**11**	**F1**	0.59	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Cobalt	**11**		0.30	0.078	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Copper	**18**	**F1**	0.59	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Iron	**18000**		12	6.2	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Lead	**17**		0.30	0.14	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Magnesium	**17000**	**F2 B**	5.9	2.9	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Manganese	**510**		0.59	0.086	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Nickel	**24**	**F1**	0.59	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Potassium	**1300**	**F1 F2**	30	10	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Selenium	<0.59	F1	0.59	0.35	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Silver	**3.4**	**F1 B**	0.30	0.076	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Sodium	**260**		59	8.8	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Thallium	**1.2**	**F1**	0.59	0.30	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Vanadium	**19**		0.30	0.070	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1
Zinc	**97**	**F1 B**	1.2	0.52	mg/Kg	☼	05/28/19 09:00	05/29/19 00:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 10:43	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:43	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:43	1

Client Sample ID: 2686V2-10-B20-1

Date Collected: 05/16/19 09:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-8

Matrix: Solid
Percent Solids: 84.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.1		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:43	1
Nickel	0.010	J	0.025	0.010	mg/L		05/29/19 14:48	05/30/19 10:43	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.044	J	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:23	1
Barium	0.37	J	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:23	1
Beryllium	0.0058		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:23	1
Boron	0.19		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:23	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:23	1
Calcium	21		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:23	1
Chromium	0.13		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:23	1
Cobalt	0.032		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:23	1
Iron	120		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:23	1
Lead	0.070		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:23	1
Manganese	0.58		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:23	1
Nickel	0.12		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:23	1
Potassium	32		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:23	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:23	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:23	1
Zinc	0.46	J	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:23	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:48	05/31/19 13:19	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:33	1
Thallium	0.0035		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:33	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.018	0.0061	mg/Kg	☼	05/29/19 14:40	05/30/19 10:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/30/19 11:00	05/30/19 17:15	1
pH	8.6		0.2	0.2	SU			05/23/19 16:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B20-2
Date Collected: 05/16/19 09:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-9
Matrix: Solid
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Acetone	**0.0097**	**J**	0.015	0.0066	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/28/19 17:50*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*05/17/19 18:04*	*05/28/19 17:50*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/17/19 18:04*	*05/28/19 17:50*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 17:50*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1

Client Sample ID: 2686V2-10-B20-2
Date Collected: 05/16/19 09:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-9
Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,4-Dimethylphenol	<0.38	*	0.38	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Chrysene	**0.020**	**J**	0.038	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1

Client Sample ID: 2686V2-10-B20-2

Date Collected: 05/16/19 09:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-9

Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Isophorone	<0.19	*	0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Pentachlorophenol	<0.78	*	0.78	0.62	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Phenanthrene	**0.011**	**J**	0.038	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1
Pyrene	**0.012**	**J**	0.038	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*70*		*31 - 143*	*05/29/19 19:59*	*05/30/19 18:06*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 19:59*	*05/30/19 18:06*	*1*
2-Fluorophenol	*53*		*31 - 166*	*05/29/19 19:59*	*05/30/19 18:06*	*1*
Nitrobenzene-d5	*36*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 18:06*	*1*
Phenol-d5	*50*		*30 - 153*	*05/29/19 19:59*	*05/30/19 18:06*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 19:59*	*05/30/19 18:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.78**	**J**	1.1	0.21	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Arsenic	**5.6**		0.54	0.18	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Barium	**46**		0.54	0.062	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Beryllium	**0.72**		0.22	0.050	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Boron	**18**		2.7	0.25	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Cadmium	**0.26**		0.11	0.019	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Calcium	**63000**	**B**	54	9.2	mg/Kg	☼	05/28/19 09:00	05/29/19 15:05	5
Chromium	**19**		0.54	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Cobalt	**14**		0.27	0.071	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Copper	**19**		0.54	0.15	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Iron	**18000**		11	5.6	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Lead	**11**		0.27	0.12	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Magnesium	**30000**	**B**	5.4	2.7	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Manganese	**410**		0.54	0.078	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Nickel	**31**		0.54	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Potassium	**3800**		27	9.6	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Selenium	**0.40**	**J**	0.54	0.32	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Silver	**2.5**	**B**	0.27	0.070	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Sodium	**220**		54	8.0	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Thallium	**0.87**		0.54	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Vanadium	**23**		0.27	0.064	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1
Zinc	**58**	**B**	1.1	0.47	mg/Kg	☼	05/28/19 09:00	05/29/19 00:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 10:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 10:56	1

Client Sample ID: 2686V2-10-B20-2

Date Collected: 05/16/19 09:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-9

Matrix: Solid
Percent Solids: 85.8

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:35	1
Barium	**0.061**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:35	1
Boron	**0.065**	**J**	0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:35	1
Calcium	**10**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:35	1
Chromium	**0.018**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:35	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:35	1
Iron	**9.2**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:35	1
Lead	**0.0082**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:35	1
Manganese	**0.043**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:35	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:35	1
Potassium	**6.4**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:35	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:35	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:35	1
Zinc	**0.10**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:35	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:46	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0061	mg/Kg	☼	05/29/19 14:40	05/30/19 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/30/19 11:00	05/30/19 17:16	1
pH	**8.1**		0.2	0.2	SU			05/23/19 16:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B22-1
Date Collected: 05/16/19 10:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-12
Matrix: Solid
Percent Solids: 93.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,2-Dichloropropane	<0.0014		0.0014	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Acetone	**0.0061**	**J**	0.014	0.0061	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Carbon disulfide	<0.0035		0.0035	0.00073	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00039	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Ethylbenzene	<0.0014		0.0014	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Methylene Chloride	**0.0015**	**J**	0.0035	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Vinyl chloride	<0.0014		0.0014	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/17/19 18:04*	*05/28/19 19:07*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*05/17/19 18:04*	*05/28/19 19:07*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*05/17/19 18:04*	*05/28/19 19:07*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 19:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1

Client Sample ID: 2686V2-10-B22-1
Date Collected: 05/16/19 10:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-12
Matrix: Solid
Percent Solids: 93.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,4-Dimethylphenol	<0.35	*	0.35	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Benzo[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Benzo[a]pyrene	<0.035		0.035	0.0068	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Chrysene	<0.035		0.035	0.0096	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B22-1
Date Collected: 05/16/19 10:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-12
Matrix: Solid
Percent Solids: 93.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Isophorone	<0.18	*	0.18	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Pentachlorophenol	<0.71	*	0.71	0.57	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Phenol	<0.18		0.18	0.078	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1
Pyrene	<0.035		0.035	0.0070	mg/Kg	☼	05/29/19 19:59	05/30/19 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*31 - 143*	*05/29/19 19:59*	*05/30/19 13:43*	*1*
2-Fluorobiphenyl	*58*		*43 - 145*	*05/29/19 19:59*	*05/30/19 13:43*	*1*
2-Fluorophenol	*55*		*31 - 166*	*05/29/19 19:59*	*05/30/19 13:43*	*1*
Nitrobenzene-d5	*38*		*37 - 147*	*05/29/19 19:59*	*05/30/19 13:43*	*1*
Phenol-d5	*52*		*30 - 153*	*05/29/19 19:59*	*05/30/19 13:43*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 19:59*	*05/30/19 13:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.76**	**J**	1.0	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Arsenic	**4.8**		0.52	0.18	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Barium	**45**		0.52	0.060	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Beryllium	**0.74**		0.21	0.049	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Boron	**17**		2.6	0.24	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Cadmium	**0.27**		0.10	0.019	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Calcium	**64000**	**B**	52	8.9	mg/Kg	☼	05/28/19 09:00	05/29/19 15:29	5
Chromium	**19**		0.52	0.26	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Cobalt	**16**		0.26	0.068	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Copper	**18**		0.52	0.15	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Iron	**17000**		10	5.4	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Lead	**11**		0.26	0.12	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Magnesium	**28000**	**B**	5.2	2.6	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Manganese	**390**		0.52	0.076	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Nickel	**31**		0.52	0.15	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Potassium	**3700**		26	9.3	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Silver	**2.3**	**B**	0.26	0.067	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Sodium	**240**		52	7.7	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Thallium	**0.80**		0.52	0.26	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Vanadium	**23**		0.26	0.062	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1
Zinc	**57**	**B**	1.0	0.46	mg/Kg	☼	05/28/19 09:00	05/29/19 00:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:48	05/30/19 11:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 11:08	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:08	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 11:08	1

Client Sample ID: 2686V2-10-B22-1

Date Collected: 05/16/19 10:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-12

Matrix: Solid
Percent Solids: 93.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 11:08	1
Manganese	**0.41**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:08	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:08	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.055**		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:46	1
Barium	**0.59**		0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:46	1
Beryllium	**0.0084**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:46	1
Boron	**0.27**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:46	1
Calcium	**79**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:46	1
Chromium	**0.18**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:46	1
Cobalt	**0.049**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:46	1
Iron	**150**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:46	1
Lead	**0.088**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:46	1
Manganese	**0.67**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:46	1
Nickel	**0.17**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:46	1
Potassium	**49**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:46	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:46	1
Silver	**0.011**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:46	1
Zinc	**0.77**		0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:46	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:48	05/31/19 13:28	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 14:58	1
Thallium	**0.0028**		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 14:58	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0057	mg/Kg	☼	05/29/19 14:40	05/30/19 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	05/29/19 23:30	05/30/19 12:32	1
pH	**8.6**		0.2	0.2	SU			05/23/19 16:52	1

Client Sample ID: 2686V2-10-B22-2

Date Collected: 05/16/19 10:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-13

Matrix: Solid
Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 19:33*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*05/17/19 18:04*	*05/28/19 19:33*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*05/17/19 18:04*	*05/28/19 19:33*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/28/19 19:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1

Client Sample ID: 2686V2-10-B22-2
Date Collected: 05/16/19 10:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-13
Matrix: Solid
Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1

Client Sample ID: 2686V2-10-B22-2

Date Collected: 05/16/19 10:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-13

Matrix: Solid
Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Isophorone	<0.20	*	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Pentachlorophenol	<0.80	*	0.80	0.64	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	05/29/19 19:59	05/30/19 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*31 - 143*	*05/29/19 19:59*	*05/30/19 14:07*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 19:59*	*05/30/19 14:07*	*1*
2-Fluorophenol	*48*		*31 - 166*	*05/29/19 19:59*	*05/30/19 14:07*	*1*
Nitrobenzene-d5	*32*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 14:07*	*1*
Phenol-d5	*45*		*30 - 153*	*05/29/19 19:59*	*05/30/19 14:07*	*1*
Terphenyl-d14	*65*		*42 - 157*	*05/29/19 19:59*	*05/30/19 14:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.74**	**J**	1.2	0.23	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Arsenic	**5.1**		0.59	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Barium	**37**		0.59	0.067	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Beryllium	**0.73**		0.24	0.055	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Boron	**18**		2.9	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Cadmium	**0.23**		0.12	0.021	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Calcium	**68000**	**B**	59	10	mg/Kg	☼	05/28/19 09:00	05/29/19 15:33	5
Chromium	**19**		0.59	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Cobalt	**9.2**		0.29	0.077	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Copper	**20**		0.59	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Iron	**17000**		12	6.1	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Lead	**12**		0.29	0.14	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Magnesium	**34000**	**B**	5.9	2.9	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Manganese	**390**		0.59	0.085	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Nickel	**27**		0.59	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Potassium	**3900**		29	10	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Silver	**2.5**	**B**	0.29	0.076	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Sodium	**230**		59	8.7	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Thallium	**0.84**		0.59	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Vanadium	**23**		0.29	0.070	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1
Zinc	**56**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 09:00	05/29/19 00:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 11:12	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:12	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 11:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 11:12	1

Client Sample ID: 2686V2-10-B22-2

Date Collected: 05/16/19 10:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-13

Matrix: Solid
Percent Solids: 82.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.49**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:12	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:12	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.035**	**J**	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:50	1
Barium	**0.41**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:50	1
Beryllium	**0.0060**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:50	1
Boron	**0.23**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:50	1
Calcium	**54**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:50	1
Chromium	**0.14**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:50	1
Cobalt	**0.031**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:50	1
Iron	**100**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:50	1
Lead	**0.064**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:50	1
Manganese	**0.47**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:50	1
Nickel	**0.12**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:50	1
Potassium	**40**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:50	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:50	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:50	1
Zinc	**0.32**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:50	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 15:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 15:02	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.019	0.0062	mg/Kg	☼	05/29/19 14:40	05/30/19 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.41		0.41	0.14	mg/Kg	☼	05/29/19 23:30	05/30/19 12:32	1
pH	**8.0**		0.2	0.2	SU			05/23/19 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B22-2 Dup

Date Collected: 05/16/19 10:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-14

Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/17/19 18:04*	*05/28/19 12:14*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/17/19 18:04*	*05/28/19 12:14*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/17/19 18:04*	*05/28/19 12:14*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/17/19 18:04*	*05/28/19 12:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1

Client Sample ID: 2686V2-10-B22-2 Dup

Date Collected: 05/16/19 10:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-14

Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Chrysene	**0.021**	**J**	0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1

Client Sample ID: 2686V2-10-B22-2 Dup

Date Collected: 05/16/19 10:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-14

Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Isophorone	<0.20	*	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Pentachlorophenol	<0.79	*	0.79	0.63	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Phenanthrene	**0.017**	**J**	0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1
Pyrene	**0.0093**	**J**	0.039	0.0078	mg/Kg	☼	05/29/19 19:59	05/30/19 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*87*		*31 - 143*	*05/29/19 19:59*	*05/30/19 14:31*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*05/29/19 19:59*	*05/30/19 14:31*	*1*
2-Fluorophenol	*50*		*31 - 166*	*05/29/19 19:59*	*05/30/19 14:31*	*1*
Nitrobenzene-d5	*36*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 14:31*	*1*
Phenol-d5	*48*		*30 - 153*	*05/29/19 19:59*	*05/30/19 14:31*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 19:59*	*05/30/19 14:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.92**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Arsenic	**4.5**		0.57	0.19	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Barium	**48**		0.57	0.065	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Beryllium	**0.73**		0.23	0.053	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Boron	**19**		2.8	0.26	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Cadmium	**0.24**		0.11	0.020	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Calcium	**63000**	**B**	57	9.6	mg/Kg	☼	05/28/19 09:00	05/29/19 15:37	5
Chromium	**21**		0.57	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Cobalt	**13**		0.28	0.074	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Copper	**19**		0.57	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Iron	**18000**		11	5.9	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Lead	**10**		0.28	0.13	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Magnesium	**30000**	**B**	5.7	2.8	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Manganese	**380**		0.57	0.082	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Nickel	**32**		0.57	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Potassium	**4100**		28	10	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Silver	**2.6**	**B**	0.28	0.073	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Sodium	**200**		57	8.4	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Thallium	**0.87**		0.57	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Vanadium	**23**		0.28	0.067	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1
Zinc	**56**	**B**	1.1	0.50	mg/Kg	☼	05/28/19 09:00	05/29/19 01:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:54	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:54	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B22-2 Dup
Date Collected: 05/16/19 10:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-14
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:54	1
Calcium	**8.6**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:54	1
Chromium	**0.024**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:54	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:54	1
Iron	**4.2**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:54	1
Manganese	**0.021**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:54	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:54	1
Potassium	**3.8**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:54	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:54	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:54	1
Zinc	**0.17**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 15:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 15:06	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 11:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0062	mg/Kg	☼	05/29/19 14:40	05/30/19 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.45		0.45	0.16	mg/Kg	☼	05/29/19 23:30	05/30/19 12:32	1
pH	**7.9**		0.2	0.2	SU			05/23/19 17:18	1

Client Sample ID: 2686V2-10-B23-1
Date Collected: 05/16/19 10:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-15
Matrix: Solid
Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/17/19 18:04*	*05/28/19 12:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 131*	*05/17/19 18:04*	*05/28/19 12:39*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/17/19 18:04*	*05/28/19 12:39*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/17/19 18:04*	*05/28/19 12:39*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1

Client Sample ID: 2686V2-10-B23-1
Date Collected: 05/16/19 10:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-15
Matrix: Solid
Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1

Client Sample ID: 2686V2-10-B23-1
Date Collected: 05/16/19 10:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-15
Matrix: Solid
Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Isophorone	<0.20	*	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Pentachlorophenol	<0.80	*	0.80	0.63	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/29/19 19:59	05/30/19 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*31 - 143*	*05/29/19 19:59*	*05/30/19 14:55*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 19:59*	*05/30/19 14:55*	*1*
2-Fluorophenol	*57*		*31 - 166*	*05/29/19 19:59*	*05/30/19 14:55*	*1*
Nitrobenzene-d5	*41*		*37 - 147*	*05/29/19 19:59*	*05/30/19 14:55*	*1*
Phenol-d5	*51*		*30 - 153*	*05/29/19 19:59*	*05/30/19 14:55*	*1*
Terphenyl-d14	*67*		*42 - 157*	*05/29/19 19:59*	*05/30/19 14:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.51**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Arsenic	**7.1**		0.56	0.19	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Barium	**62**		0.56	0.064	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Beryllium	**0.77**		0.22	0.052	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Cadmium	**0.32**		0.11	0.020	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Calcium	**62000**	**B**	56	9.5	mg/Kg	☼	05/28/19 09:00	05/29/19 15:41	5
Chromium	**20**		0.56	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Cobalt	**16**		0.28	0.074	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Copper	**23**		0.56	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Iron	**21000**		11	5.8	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Lead	**15**		0.28	0.13	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Magnesium	**29000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Manganese	**590**		0.56	0.081	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Nickel	**38**		0.56	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Potassium	**3500**		28	9.9	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Selenium	**0.45**	**J**	0.56	0.33	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Silver	**2.4**	**B**	0.28	0.072	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Sodium	**140**		56	8.3	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Thallium	**0.82**		0.56	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Vanadium	**27**		0.28	0.066	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1
Zinc	**64**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 09:00	05/29/19 01:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 11:21	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 11:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 11:21	1
Manganese	**0.20**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:21	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B23-1

Date Collected: 05/16/19 10:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-15

Matrix: Solid
Percent Solids: 82.8

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.022**	**J**	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 10:58	1
Barium	**0.29**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 10:58	1
Beryllium	**0.0050**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 10:58	1
Boron	**0.16**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 10:58	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 10:58	1
Calcium	**32**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:58	1
Chromium	**0.097**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:58	1
Cobalt	**0.022**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:58	1
Iron	**72**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 10:58	1
Lead	**0.048**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 10:58	1
Manganese	**0.30**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:58	1
Nickel	**0.075**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:58	1
Potassium	**26**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 10:58	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 10:58	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 10:58	1
Zinc	**0.19**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 10:58	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 15:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 15:10	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.017	0.0058	mg/Kg	☼	05/29/19 14:40	05/30/19 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	05/29/19 23:30	05/30/19 12:33	1
pH	**7.9**		0.2	0.2	SU			05/23/19 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B23-2
Date Collected: 05/16/19 10:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-16
Matrix: Solid
Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Acetone	**0.0077**	**J**	0.015	0.0065	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 13:05*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/17/19 18:04*	*05/28/19 13:05*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/17/19 18:04*	*05/28/19 13:05*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/17/19 18:04*	*05/28/19 13:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1

Client Sample ID: 2686V2-10-B23-2
Date Collected: 05/16/19 10:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-16
Matrix: Solid
Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,4-Dimethylphenol	<0.38	*	0.38	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Benzo[b]fluoranthene	<0.038		0.038	0.0081	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Chrysene	**0.019**	**J**	0.038	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1

Client Sample ID: 2686V2-10-B23-2

Date Collected: 05/16/19 10:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-16

Matrix: Solid
Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Isophorone	<0.19	*	0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Pentachlorophenol	<0.76	*	0.76	0.61	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Phenanthrene	**0.024**	**J**	0.038	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1
Pyrene	**0.0088**	**J**	0.038	0.0075	mg/Kg	☼	05/29/19 19:59	05/30/19 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*65*		*31 - 143*	*05/29/19 19:59*	*05/30/19 15:18*	*1*
2-Fluorobiphenyl	*51*		*43 - 145*	*05/29/19 19:59*	*05/30/19 15:18*	*1*
2-Fluorophenol	*49*		*31 - 166*	*05/29/19 19:59*	*05/30/19 15:18*	*1*
Nitrobenzene-d5	*34*	*X*	*37 - 147*	*05/29/19 19:59*	*05/30/19 15:18*	*1*
Phenol-d5	*46*		*30 - 153*	*05/29/19 19:59*	*05/30/19 15:18*	*1*
Terphenyl-d14	*67*		*42 - 157*	*05/29/19 19:59*	*05/30/19 15:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.53**	**J**	1.1	0.21	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Arsenic	**4.4**		0.54	0.19	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Barium	**43**		0.54	0.062	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Beryllium	**0.71**		0.22	0.051	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Boron	**17**		2.7	0.25	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Cadmium	**0.21**		0.11	0.020	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Calcium	**66000**	**B**	54	9.2	mg/Kg	☼	05/28/19 09:00	05/29/19 15:45	5
Chromium	**19**		0.54	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Cobalt	**16**		0.27	0.071	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Copper	**19**		0.54	0.15	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Iron	**17000**		11	5.6	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Magnesium	**31000**	**B**	5.4	2.7	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Manganese	**380**		0.54	0.079	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Nickel	**30**		0.54	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Potassium	**3700**		27	9.6	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Silver	**2.3**	**B**	0.27	0.070	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Sodium	**170**		54	8.0	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Thallium	**0.82**		0.54	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Vanadium	**22**		0.27	0.064	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1
Zinc	**56**	**B**	1.1	0.48	mg/Kg	☼	05/28/19 09:00	05/29/19 01:11	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 11:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 11:25	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B23-2

Date Collected: 05/16/19 10:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-16

Matrix: Solid
Percent Solids: 85.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 14:46	05/30/19 11:02	1
Barium	**0.088**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 11:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 11:02	1
Boron	**0.068**	**J**	0.10	0.050	mg/L		05/29/19 14:46	05/30/19 11:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 11:02	1
Calcium	**14**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 11:02	1
Chromium	**0.031**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:02	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:02	1
Iron	**17**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 11:02	1
Lead	**0.016**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 11:02	1
Manganese	**0.090**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:02	1
Nickel	**0.022**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:02	1
Potassium	**9.8**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 11:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 11:02	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:02	1
Zinc	**0.19**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 11:02	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 15:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 15:14	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0063	mg/Kg	☼	05/29/19 14:40	05/30/19 11:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.24**	**J**	0.47	0.16	mg/Kg	☼	05/29/19 23:30	05/30/19 12:33	1
pH	**8.2**		0.2	0.2	SU			05/23/19 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B25
Date Collected: 05/16/19 11:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-19
Matrix: Solid
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/17/19 18:04*	*05/28/19 14:22*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/28/19 14:22*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/17/19 18:04*	*05/28/19 14:22*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/17/19 18:04*	*05/28/19 14:22*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1

Client Sample ID: 2686V2-10-B25
Date Collected: 05/16/19 11:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-19
Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,4-Dimethylphenol	<0.37	*	0.37	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1

Client Sample ID: 2686V2-10-B25
Date Collected: 05/16/19 11:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-19
Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Isophorone	<0.19	*	0.19	0.042	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Pentachlorophenol	<0.75	*	0.75	0.60	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/29/19 19:59	05/30/19 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*31 - 143*	*05/29/19 19:59*	*05/30/19 16:06*	*1*
2-Fluorobiphenyl	*62*		*43 - 145*	*05/29/19 19:59*	*05/30/19 16:06*	*1*
2-Fluorophenol	*59*		*31 - 166*	*05/29/19 19:59*	*05/30/19 16:06*	*1*
Nitrobenzene-d5	*41*		*37 - 147*	*05/29/19 19:59*	*05/30/19 16:06*	*1*
Phenol-d5	*55*		*30 - 153*	*05/29/19 19:59*	*05/30/19 16:06*	*1*
Terphenyl-d14	*75*		*42 - 157*	*05/29/19 19:59*	*05/30/19 16:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.92**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Arsenic	**5.0**		0.56	0.19	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Barium	**47**		0.56	0.064	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Beryllium	**0.72**		0.22	0.052	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Boron	**18**		2.8	0.26	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Cadmium	**0.27**		0.11	0.020	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Calcium	**67000**	**B**	56	9.5	mg/Kg	☼	05/28/19 09:00	05/29/19 15:58	5
Chromium	**19**		0.56	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Cobalt	**11**		0.28	0.074	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Copper	**20**		0.56	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Iron	**18000**		11	5.8	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Magnesium	**31000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Manganese	**410**		0.56	0.081	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Nickel	**33**		0.56	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Potassium	**3800**		28	9.9	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Selenium	**0.52**	**J**	0.56	0.33	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Silver	**2.4**	**B**	0.28	0.072	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Sodium	**160**		56	8.3	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Thallium	**0.95**		0.56	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Vanadium	**23**		0.28	0.066	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1
Zinc	**58**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 09:00	05/29/19 01:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:48	05/30/19 11:46	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:46	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 14:48	05/30/19 11:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:48	05/30/19 11:46	1

Client Sample ID: 2686V2-10-B25
Date Collected: 05/16/19 11:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-19
Matrix: Solid
Percent Solids: 85.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.60**		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:46	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:48	05/30/19 11:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.049**	**J**	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 13:21	1
Barium	**0.43**	**J**	0.50	0.050	mg/L		05/29/19 14:46	05/30/19 11:22	1
Beryllium	**0.0079**		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 11:22	1
Boron	**0.24**		0.10	0.050	mg/L		05/29/19 14:46	05/30/19 11:22	1
Cadmium	**0.0022**	**J**	0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 11:22	1
Calcium	**68**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 11:22	1
Chromium	**0.17**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:22	1
Cobalt	**0.041**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:22	1
Iron	**140**		0.40	0.20	mg/L		05/29/19 14:46	05/30/19 11:22	1
Lead	**0.076**		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 11:22	1
Manganese	**0.63**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:22	1
Nickel	**0.16**		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:22	1
Potassium	**45**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 11:22	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 11:22	1
Silver	**0.011**	**J**	0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:22	1
Zinc	**0.39**	**J**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 11:22	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 15:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 15:35	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		05/30/19 10:35	05/31/19 07:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0063	mg/Kg	☼	05/29/19 14:40	05/30/19 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/29/19 23:30	05/30/19 12:35	1
pH	**8.4**		0.2	0.2	SU			05/23/19 17:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B26
Date Collected: 05/16/19 11:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-20
Matrix: Solid
Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Acetone	**0.0081**	**J**	0.017	0.0076	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/17/19 18:04*	*05/28/19 14:47*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/17/19 18:04*	*05/28/19 14:47*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/17/19 18:04*	*05/28/19 14:47*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/17/19 18:04*	*05/28/19 14:47*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20	F1	0.20	0.043	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
1,2-Dichlorobenzene	<0.20	F1	0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
1,3-Dichlorobenzene	<0.20	F1	0.20	0.045	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
1,4-Dichlorobenzene	<0.20	F1	0.20	0.051	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,2'-oxybis[1-chloropropane]	<0.20	F1	0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1

Client Sample ID: 2686V2-10-B26
Date Collected: 05/16/19 11:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-20
Matrix: Solid
Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,4-Dichlorophenol	<0.39	F1	0.39	0.094	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,4-Dimethylphenol	<0.39	* F1	0.39	0.15	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,4-Dinitrophenol	<0.80	F1	0.80	0.70	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,4-Dinitrotoluene	<0.20	F1	0.20	0.063	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2,6-Dinitrotoluene	<0.20	F1	0.20	0.078	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2-Chloronaphthalene	<0.20	F1	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2-Chlorophenol	<0.20	F1	0.20	0.068	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2-Methylnaphthalene	<0.080	F1	0.080	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2-Methylphenol	<0.20	F1	0.20	0.064	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2-Nitroaniline	<0.20	F1	0.20	0.053	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
2-Nitrophenol	<0.39	F1	0.39	0.094	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
3 & 4 Methylphenol	<0.20	F1	0.20	0.066	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
3,3'-Dichlorobenzidine	<0.20	F1 F2	0.20	0.055	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4,6-Dinitro-2-methylphenol	<0.80	F1	0.80	0.32	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4-Bromophenyl phenyl ether	<0.20	F1	0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4-Chloro-3-methylphenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4-Chlorophenyl phenyl ether	<0.20	F1	0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4-Nitroaniline	<0.39	F1	0.39	0.17	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Acenaphthene	<0.039	F1	0.039	0.0071	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Acenaphthylene	<0.039	F1	0.039	0.0052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Anthracene	<0.039	F1	0.039	0.0066	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Benzo[a]anthracene	<0.039	F1	0.039	0.0053	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Benzo[b]fluoranthene	<0.039	F1	0.039	0.0085	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Benzo[g,h,i]perylene	<0.039	F1	0.039	0.013	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Bis(2-chloroethoxy)methane	<0.20	F1	0.20	0.040	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Bis(2-chloroethyl)ether	<0.20	F1	0.20	0.059	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.072	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.075	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Carbazole	<0.20	F1	0.20	0.099	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Dibenz(a,h)anthracene	<0.039	F1	0.039	0.0077	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Dibenzofuran	<0.20	F1	0.20	0.046	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Diethyl phthalate	<0.20	F1	0.20	0.067	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Dimethyl phthalate	<0.20	F1	0.20	0.052	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Di-n-butyl phthalate	<0.20	F1	0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Di-n-octyl phthalate	<0.20	F1	0.20	0.065	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Fluoranthene	<0.039	F1	0.039	0.0073	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Fluorene	<0.039	F1	0.039	0.0056	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Hexachlorocyclopentadiene	<0.80	F1	0.80	0.23	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Hexachloroethane	<0.20	F1	0.20	0.060	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B26
Date Collected: 05/16/19 11:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-20
Matrix: Solid
Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039	F1	0.039	0.010	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Isophorone	<0.20	* F1	0.20	0.044	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Naphthalene	<0.039	F1	0.039	0.0061	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Nitrobenzene	<0.039	F1	0.039	0.0099	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
N-Nitrosodi-n-propylamine	<0.080	F1	0.080	0.048	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
N-Nitrosodiphenylamine	<0.20	F1	0.20	0.047	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Pentachlorophenol	<0.80	*	0.80	0.64	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Phenanthrene	<0.039	F1	0.039	0.0055	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Phenol	<0.20	F1	0.20	0.088	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	05/29/19 19:59	05/30/19 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*31 - 143*	*05/29/19 19:59*	*05/30/19 16:30*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 19:59*	*05/30/19 16:30*	*1*
2-Fluorophenol	*54*		*31 - 166*	*05/29/19 19:59*	*05/30/19 16:30*	*1*
Nitrobenzene-d5	*38*		*37 - 147*	*05/29/19 19:59*	*05/30/19 16:30*	*1*
Phenol-d5	*52*		*30 - 153*	*05/29/19 19:59*	*05/30/19 16:30*	*1*
Terphenyl-d14	*73*		*42 - 157*	*05/29/19 19:59*	*05/30/19 16:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.85**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Arsenic	**5.8**		0.57	0.20	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Barium	**43**		0.57	0.065	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Beryllium	**0.71**		0.23	0.053	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Boron	**14**		2.9	0.27	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Cadmium	**0.25**		0.11	0.021	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Calcium	**54000**	**B**	57	9.7	mg/Kg	☼	05/28/19 09:00	05/29/19 16:10	5
Chromium	**19**		0.57	0.28	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Cobalt	**14**		0.29	0.075	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Copper	**21**		0.57	0.16	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Iron	**21000**		11	5.9	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Magnesium	**31000**	**B**	5.7	2.8	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Manganese	**360**		0.57	0.083	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Nickel	**33**		0.57	0.17	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Potassium	**3300**		29	10	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Selenium	**0.82**		0.57	0.34	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Silver	**2.5**	**B**	0.29	0.074	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Sodium	**130**		57	8.5	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Thallium	**0.86**		0.57	0.29	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Vanadium	**23**		0.29	0.067	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1
Zinc	**59**	**B**	1.1	0.50	mg/Kg	☼	05/28/19 09:00	05/29/19 01:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050	^	0.050	0.010	mg/L		05/29/19 14:46	05/30/19 11:26	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 14:46	05/30/19 11:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 14:46	05/30/19 11:26	1
Boron	**0.050**	**J**	0.10	0.050	mg/L		05/29/19 14:46	05/30/19 11:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Client Sample ID: 2686V2-10-B26
Date Collected: 05/16/19 11:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163564-20
Matrix: Solid
Percent Solids: 80.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 14:46	05/30/19 11:26	1
Calcium	**8.3**		2.5	0.50	mg/L		05/29/19 14:46	05/30/19 11:26	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:26	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:26	1
Iron	**1.5**	**F1**	0.40	0.20	mg/L		05/29/19 14:46	05/30/19 11:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 14:46	05/30/19 11:26	1
Manganese	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:26	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:26	1
Potassium	**1.3**	**J**	2.5	0.50	mg/L		05/29/19 14:46	05/30/19 11:26	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 14:46	05/30/19 11:26	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 14:46	05/30/19 11:26	1
Zinc	**0.31**	**J F1**	0.50	0.020	mg/L		05/29/19 14:46	05/30/19 11:26	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 14:46	05/30/19 15:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 14:46	05/30/19 15:39	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/30/19 10:35	05/31/19 07:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.020	0.0066	mg/Kg	☼	05/29/19 14:40	05/30/19 11:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/29/19 23:30	05/30/19 12:35	1
pH	**8.1**		0.2	0.2	SU			05/23/19 17:18	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F4	MS/MSD RPD exceeds control limits due to sample size difference.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163564-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	06-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory		COC No.
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com 500-163564 COC	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: ~~[redacted]~~ Project No.: PTB184-006/~~[redacted]~~018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** WILLIAM ULEWICZ	3 of 4 Lab Job No.: 500-163564 Sample Temp: 5.8, 3.4, 3.7, 3.9, 2.7

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	2686V2-10-B301	5-16	0825	S	X	X					X	X	X	X	X					
2	2686V2-10-B302		0830																	
3	2686V2-10-B303		0840																	
4	2686V2-10-B318-1		0915																	
5	2686V2-10-B318-2		0920																	
6	2686V2-10-B319-1		0930																	
7	2686V2-10-B319-2		0935																	
8	2686V2-10-B320-1		0950																	
9	2686V2-10-B320-2		0955																	
10	2686V2-10-B321-1		1000																	
11	2686V2-10-B321-2	↓	1005	↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	5/16/19 1435	[signature]	5/16/19 1435
[signature]	5/17/19 0950	[signature]	5/17/19 0950
[signature] P. Neal	5/17/19 1115	[signature]	5/17/19 1115

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project Name: ~~[redacted]~~ Project No.: PTB 184-006/AE7-018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** WILLIAM ULEWICZ

COC No.: 4 of 4

Lab Job No.: 500-163564

Sample Temp: 5.8, 3.4, 3.7, 3.9, 2.7

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:

W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
12	2686V2-10-B22-1	5-16	1030	S	X	X					X	X	X	X	X					
13	2686V2-10-B22-2		1035		↓	↓					↓	↓	↓	↓	↓					
14	2686V2-10-B22-2DUP		1040																	
15	2686V2-10-B23-1		1045																	
16	2686V2-10-B23-2		1050																	
17	2686V2-10-B24-1		1055																	
18	2686V2-10-B24-2		1100																	
19	2686V2-10-B25		1110																	
20	2686V2-10-B26		1120	↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 5/16/19 1435	Received by:	Date/Time 5/16/19 1435
Relinquished by:	Date/Time 5/17/19 9:50	Received by:	Date/Time 5/17/19 9:50
Relinquished by:	Date/Time 5/17/19 1115	Received by:	Date/Time 5/17/19 1115

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-163561-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
6/3/2019 2:46:19 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-10-B17-1

Date Collected: 05/16/19 06:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-1

Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Acetone	**0.0082**	**J**	0.016	0.0070	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/25/19 13:46*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*05/17/19 18:04*	*05/25/19 13:46*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/17/19 18:04*	*05/25/19 13:46*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/17/19 18:04*	*05/25/19 13:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20	F1	0.20	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
1,2-Dichlorobenzene	<0.20	F1	0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
1,3-Dichlorobenzene	<0.20	F1	0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
1,4-Dichlorobenzene	<0.20	F1	0.20	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B17-1
Date Collected: 05/16/19 06:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-1
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,4,6-Trichlorophenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,4-Dimethylphenol	<0.39	F1	0.39	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,4-Dinitrophenol	<0.79	F1	0.79	0.69	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,4-Dinitrotoluene	<0.20	F1	0.20	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2,6-Dinitrotoluene	<0.20	F1	0.20	0.077	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2-Chloronaphthalene	<0.20	F1	0.20	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2-Methylnaphthalene	<0.079	F1	0.079	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2-Nitroaniline	<0.20	F1	0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4-Bromophenyl phenyl ether	<0.20	F1	0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4-Chloro-3-methylphenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Acenaphthene	<0.039	F1	0.039	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Acenaphthylene	<0.039	F1	0.039	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Anthracene	<0.039	F1	0.039	0.0066	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Benzo[g,h,i]perylene	<0.039	F1	0.039	0.013	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.072	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.075	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Dibenz(a,h)anthracene	<0.039	F1	0.039	0.0076	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Dibenzofuran	<0.20	F1	0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Diethyl phthalate	<0.20	F1	0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Dimethyl phthalate	<0.20	F1	0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Di-n-butyl phthalate	<0.20	F1	0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Hexachlorobutadiene	<0.20	F1	0.20	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Hexachlorocyclopentadiene	<0.79	F1	0.79	0.23	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Hexachloroethane	<0.20	F1	0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1

Client Sample ID: 2686V2-10-B17-1
Date Collected: 05/16/19 06:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-1
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039	F1	0.039	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Naphthalene	<0.039	F1	0.039	0.0060	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Nitrobenzene	<0.039	F1	0.039	0.0098	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/29/19 07:49	05/30/19 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*43*		*31 - 143*	*05/29/19 07:49*	*05/30/19 16:14*	*1*
2-Fluorobiphenyl	*64*		*43 - 145*	*05/29/19 07:49*	*05/30/19 16:14*	*1*
2-Fluorophenol	*86*		*31 - 166*	*05/29/19 07:49*	*05/30/19 16:14*	*1*
Nitrobenzene-d5	*58*		*37 - 147*	*05/29/19 07:49*	*05/30/19 16:14*	*1*
Phenol-d5	*77*		*30 - 153*	*05/29/19 07:49*	*05/30/19 16:14*	*1*
Terphenyl-d14	*77*		*42 - 157*	*05/29/19 07:49*	*05/30/19 16:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.86**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Arsenic	**5.7**		0.56	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Barium	**56**		0.56	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Beryllium	**0.86**		0.22	0.052	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Boron	**20**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Cadmium	**0.24**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Calcium	**72000**	**B**	56	9.5	mg/Kg	☼	05/28/19 08:58	05/29/19 18:17	5
Chromium	**22**		0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Cobalt	**16**		0.28	0.074	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Copper	**21**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Iron	**16000**	**B**	11	5.8	mg/Kg	☼	05/29/19 17:15	05/30/19 11:08	1
Lead	**12**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Magnesium	**29000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Manganese	**460**		0.56	0.081	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Nickel	**35**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Potassium	**4400**		28	9.9	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Silver	**2.6**		0.28	0.072	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Sodium	**170**		56	8.3	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Thallium	**0.80**		0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Vanadium	**26**		0.28	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1
Zinc	**57**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 08:58	05/28/19 21:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		05/28/19 14:38	05/29/19 09:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B17-1

Date Collected: 05/16/19 06:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-1

Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 17:48	1
Barium	**0.071**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 17:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 17:48	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 17:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 17:48	1
Calcium	**12**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 17:48	1
Chromium	**0.013**	**J ^**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:48	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:48	1
Iron	**7.3**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 17:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 17:48	1
Manganese	**0.042**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:48	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:48	1
Potassium	**5.8**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 17:48	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 17:48	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:48	1
Zinc	**0.053**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 17:48	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:34	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J B**	0.019	0.0064	mg/Kg	☼	05/28/19 15:10	05/29/19 08:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.48		0.48	0.17	mg/Kg	☼	05/29/19 14:30	05/29/19 19:02	1
pH	**8.7**		0.2	0.2	SU			05/23/19 14:35	1

Client Sample ID: 2686V2-10-B17-2

Date Collected: 05/16/19 06:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-2

Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Acetone	**0.013**	**J**	0.016	0.0070	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/25/19 14:12*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*05/17/19 18:04*	*05/25/19 14:12*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/17/19 18:04*	*05/25/19 14:12*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/25/19 14:12*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1

Client Sample ID: 2686V2-10-B17-2
Date Collected: 05/16/19 06:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-2
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Benzo[a]pyrene	**0.011**	**J**	0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1

Client Sample ID: 2686V2-10-B17-2

Date Collected: 05/16/19 06:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-2

Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Phenanthrene	**0.019**	**J**	0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1
Pyrene	**0.0087**	**J**	0.038	0.0077	mg/Kg	☼	05/29/19 07:49	05/30/19 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*42*		*31 - 143*	*05/29/19 07:49*	*05/30/19 16:40*	*1*
2-Fluorobiphenyl	*55*		*43 - 145*	*05/29/19 07:49*	*05/30/19 16:40*	*1*
2-Fluorophenol	*69*		*31 - 166*	*05/29/19 07:49*	*05/30/19 16:40*	*1*
Nitrobenzene-d5	*49*		*37 - 147*	*05/29/19 07:49*	*05/30/19 16:40*	*1*
Phenol-d5	*64*		*30 - 153*	*05/29/19 07:49*	*05/30/19 16:40*	*1*
Terphenyl-d14	*71*		*42 - 157*	*05/29/19 07:49*	*05/30/19 16:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.65**	**J B**	1.1	0.21	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Arsenic	**5.1**		0.55	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Barium	**53**		0.55	0.063	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Beryllium	**0.81**		0.22	0.051	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Boron	**20**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Cadmium	**0.27**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Calcium	**72000**	**B**	55	9.3	mg/Kg	☼	05/28/19 08:58	05/29/19 18:22	5
Chromium	**21**		0.55	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Cobalt	**14**		0.28	0.072	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Copper	**19**		0.55	0.15	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Iron	**18000**	**B**	12	6.0	mg/Kg	☼	05/29/19 17:15	05/30/19 11:36	1
Lead	**11**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Magnesium	**30000**	**B**	5.5	2.7	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Manganese	**410**		0.55	0.080	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Nickel	**36**		0.55	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Potassium	**4400**		28	9.7	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Silver	**2.4**		0.28	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Sodium	**210**		55	8.2	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Thallium	**0.76**		0.55	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Vanadium	**24**		0.28	0.065	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1
Zinc	**130**	**B**	1.1	0.48	mg/Kg	☼	05/28/19 08:58	05/28/19 21:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 17:52	1
Barium	**0.051**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 17:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 17:52	1
Boron	**0.089**	**J**	0.10	0.050	mg/L		05/29/19 07:39	05/29/19 17:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B17-2
Date Collected: 05/16/19 06:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-2
Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 17:52	1
Calcium	**13**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 17:52	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:52	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:52	1
Iron	**1.0**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 17:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 17:52	1
Manganese	**0.014**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:52	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:52	1
Potassium	**3.0**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 17:52	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 17:52	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:52	1
Zinc	**0.031**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 17:52	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:38	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J B**	0.018	0.0060	mg/Kg	☼	05/28/19 15:10	05/29/19 09:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	05/29/19 14:30	05/29/19 19:03	1
pH	**8.7**		0.2	0.2	SU			05/23/19 14:41	1

Client Sample ID: 2686V2-10-B17-1 Dup

Date Collected: 05/16/19 06:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-3

Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Acetone	**0.0080**	**J**	0.016	0.0071	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Methylene Chloride	**0.0037**	**J**	0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/25/19 14:38*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*05/17/19 18:04*	*05/25/19 14:38*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/17/19 18:04*	*05/25/19 14:38*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/25/19 14:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B17-1 Dup
Date Collected: 05/16/19 06:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-3
Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1

Client Sample ID: 2686V2-10-B17-1 Dup

Date Collected: 05/16/19 06:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-3

Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	05/29/19 07:49	05/30/19 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*48*		*31 - 143*	*05/29/19 07:49*	*05/30/19 17:07*	*1*
2-Fluorobiphenyl	*61*		*43 - 145*	*05/29/19 07:49*	*05/30/19 17:07*	*1*
2-Fluorophenol	*78*		*31 - 166*	*05/29/19 07:49*	*05/30/19 17:07*	*1*
Nitrobenzene-d5	*53*		*37 - 147*	*05/29/19 07:49*	*05/30/19 17:07*	*1*
Phenol-d5	*68*		*30 - 153*	*05/29/19 07:49*	*05/30/19 17:07*	*1*
Terphenyl-d14	*73*		*42 - 157*	*05/29/19 07:49*	*05/30/19 17:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.62**	**J B**	1.1	0.21	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Arsenic	**4.5**		0.54	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Barium	**59**		0.54	0.062	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Beryllium	**0.90**		0.22	0.051	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Boron	**21**		2.7	0.25	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Cadmium	**0.26**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Calcium	**70000**	**B**	54	9.2	mg/Kg	☼	05/28/19 08:58	05/29/19 18:26	5
Chromium	**23**		0.54	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Cobalt	**15**		0.27	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Copper	**20**		0.54	0.15	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Iron	**19000**	**B**	12	6.0	mg/Kg	☼	05/29/19 17:15	05/30/19 11:41	1
Lead	**12**	**B**	0.27	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Magnesium	**30000**	**B**	5.4	2.7	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Manganese	**520**		0.54	0.079	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Nickel	**42**		0.54	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Potassium	**4700**		27	9.6	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Silver	**2.7**		0.27	0.070	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Sodium	**180**		54	8.0	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Thallium	**0.98**		0.54	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Vanadium	**27**		0.27	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1
Zinc	**58**	**B**	1.1	0.48	mg/Kg	☼	05/28/19 08:58	05/28/19 21:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:38	05/29/19 09:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:38	05/29/19 09:35	1

Client Sample ID: 2686V2-10-B17-1 Dup
Date Collected: 05/16/19 06:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-3
Matrix: Solid
Percent Solids: 84.1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 17:56	1
Barium	**0.092**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 17:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 17:56	1
Boron	**0.077**	**J**	0.10	0.050	mg/L		05/29/19 07:39	05/29/19 17:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 17:56	1
Calcium	**11**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 17:56	1
Chromium	**0.016**	**J ^**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:56	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:56	1
Iron	**8.3**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 17:56	1
Lead	**0.0095**		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 17:56	1
Manganese	**0.047**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:56	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:56	1
Potassium	**7.2**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 17:56	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 17:56	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 17:56	1
Zinc	**0.043**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 17:56	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:42	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J B**	0.020	0.0065	mg/Kg	☼	05/28/19 15:10	05/29/19 09:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	05/29/19 14:30	05/29/19 19:03	1
pH	**9.0**		0.2	0.2	SU			05/23/19 14:47	1

Client Sample ID: 2686V2-10-B16-1

Date Collected: 05/16/19 06:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-4

Matrix: Solid
Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Carbon disulfide	<0.0045		0.0045	0.00095	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Methylene Chloride	**0.0021**	**J**	0.0045	0.0018	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/17/19 18:04	05/25/19 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/25/19 15:04*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*05/17/19 18:04*	*05/25/19 15:04*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*05/17/19 18:04*	*05/25/19 15:04*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/25/19 15:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1

Client Sample ID: 2686V2-10-B16-1
Date Collected: 05/16/19 06:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-4
Matrix: Solid
Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1

Client Sample ID: 2686V2-10-B16-1
Date Collected: 05/16/19 06:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-4
Matrix: Solid
Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	05/29/19 07:49	05/30/19 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*50*		*31 - 143*	*05/29/19 07:49*	*05/30/19 17:33*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 07:49*	*05/30/19 17:33*	*1*
2-Fluorophenol	*74*		*31 - 166*	*05/29/19 07:49*	*05/30/19 17:33*	*1*
Nitrobenzene-d5	*50*		*37 - 147*	*05/29/19 07:49*	*05/30/19 17:33*	*1*
Phenol-d5	*33*		*30 - 153*	*05/29/19 07:49*	*05/30/19 17:33*	*1*
Terphenyl-d14	*74*		*42 - 157*	*05/29/19 07:49*	*05/30/19 17:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.65**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Arsenic	**4.9**		0.57	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Barium	**39**		0.57	0.065	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Beryllium	**0.86**		0.23	0.054	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Boron	**19**		2.9	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Cadmium	**0.22**	**B**	0.11	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Calcium	**54000**	**B**	57	9.7	mg/Kg	☼	05/28/19 08:58	05/29/19 18:30	5
Chromium	**23**		0.57	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Cobalt	**12**		0.29	0.075	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Copper	**20**		0.57	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Iron	**23000**	**B**	12	6.0	mg/Kg	☼	05/29/19 17:15	05/30/19 11:45	1
Lead	**13**	**B**	0.29	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Magnesium	**29000**	**B**	5.7	2.8	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Manganese	**360**		0.57	0.083	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Nickel	**35**		0.57	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Potassium	**4500**		29	10	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Silver	**3.0**		0.29	0.074	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Sodium	**160**		57	8.5	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Thallium	**1.1**		0.57	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Vanadium	**26**		0.29	0.068	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1
Zinc	**58**	**B**	1.1	0.50	mg/Kg	☼	05/28/19 08:58	05/28/19 21:40	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:00	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:00	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B16-1
Date Collected: 05/16/19 06:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-4
Matrix: Solid
Percent Solids: 81.2

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:00	1
Calcium	**8.1**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:00	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:00	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:00	1
Iron	**2.0**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:00	1
Manganese	**0.013**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:00	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:00	1
Potassium	**2.3**	**J**	2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:00	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:00	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:00	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:00	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:46	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J B**	0.019	0.0064	mg/Kg	☼	05/28/19 15:10	05/29/19 09:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/29/19 14:30	05/29/19 19:04	1
pH	**8.6**		0.2	0.2	SU			05/23/19 15:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B16-2

Date Collected: 05/16/19 06:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-5

Matrix: Solid
Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Acetone	**0.0068**	**J**	0.016	0.0068	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Methylene Chloride	**0.0015**	**J**	0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/17/19 18:04	05/25/19 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/25/19 15:30*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/17/19 18:04*	*05/25/19 15:30*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/25/19 15:30*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/17/19 18:04*	*05/25/19 15:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1

Client Sample ID: 2686V2-10-B16-2
Date Collected: 05/16/19 06:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-5
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2-Methylnaphthalene	**0.021**	**J**	0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Chrysene	**0.018**	**J**	0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1

Client Sample ID: 2686V2-10-B16-2

Date Collected: 05/16/19 06:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-5

Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Naphthalene	**0.0068**	**J**	0.038	0.0059	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Phenanthrene	**0.035**	**J**	0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1
Pyrene	**0.011**	**J**	0.038	0.0077	mg/Kg	☼	05/29/19 07:49	05/30/19 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*45*		*31 - 143*	*05/29/19 07:49*	*05/30/19 17:59*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 07:49*	*05/30/19 17:59*	*1*
2-Fluorophenol	*73*		*31 - 166*	*05/29/19 07:49*	*05/30/19 17:59*	*1*
Nitrobenzene-d5	*52*		*37 - 147*	*05/29/19 07:49*	*05/30/19 17:59*	*1*
Phenol-d5	*65*		*30 - 153*	*05/29/19 07:49*	*05/30/19 17:59*	*1*
Terphenyl-d14	*71*		*42 - 157*	*05/29/19 07:49*	*05/30/19 17:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.73**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Arsenic	**5.6**		0.59	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Barium	**43**		0.59	0.067	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Beryllium	**0.68**		0.24	0.055	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Boron	**17**		2.9	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Cadmium	**0.23**	**B**	0.12	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Calcium	**79000**	**B**	59	10	mg/Kg	☼	05/28/19 08:58	05/29/19 18:34	5
Chromium	**17**		0.59	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Cobalt	**13**		0.29	0.077	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Copper	**21**		0.59	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Iron	**18000**	**B**	11	6.0	mg/Kg	☼	05/29/19 17:15	05/30/19 11:49	1
Lead	**11**	**B**	0.29	0.14	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Magnesium	**34000**	**B**	5.9	2.9	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Manganese	**440**		0.59	0.085	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Nickel	**30**		0.59	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Potassium	**3600**		29	10	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Silver	**2.0**		0.29	0.076	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Sodium	**180**		59	8.7	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Thallium	**0.78**		0.59	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Vanadium	**21**		0.29	0.069	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1
Zinc	**51**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 08:58	05/28/19 21:44	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:04	1
Barium	**0.076**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:04	1
Boron	**0.058**	**J**	0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B16-2
Date Collected: 05/16/19 06:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-5
Matrix: Solid
Percent Solids: 83.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:04	1
Calcium	**15**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:04	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:04	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:04	1
Iron	**3.2**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:04	1
Manganese	**0.043**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:04	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:04	1
Potassium	**4.9**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:04	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:04	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:04	1
Zinc	**0.050**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:51	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J B**	0.019	0.0063	mg/Kg	☼	05/28/19 15:10	05/29/19 09:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/29/19 14:30	05/29/19 19:04	1
pH	**8.9**		0.2	0.2	SU			05/23/19 15:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B11
Date Collected: 05/16/19 06:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-6
Matrix: Solid
Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/17/19 18:04*	*05/27/19 13:45*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/17/19 18:04*	*05/27/19 13:45*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/17/19 18:04*	*05/27/19 13:45*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/27/19 13:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1

Client Sample ID: 2686V2-10-B11
Date Collected: 05/16/19 06:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-6
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B11
Date Collected: 05/16/19 06:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-6
Matrix: Solid
Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	05/29/19 07:49	05/30/19 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*45*		*31 - 143*	*05/29/19 07:49*	*05/30/19 18:25*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 07:49*	*05/30/19 18:25*	*1*
2-Fluorophenol	*73*		*31 - 166*	*05/29/19 07:49*	*05/30/19 18:25*	*1*
Nitrobenzene-d5	*51*		*37 - 147*	*05/29/19 07:49*	*05/30/19 18:25*	*1*
Phenol-d5	*65*		*30 - 153*	*05/29/19 07:49*	*05/30/19 18:25*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 07:49*	*05/30/19 18:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.66**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Arsenic	**4.0**		0.59	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Barium	**42**		0.59	0.067	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Beryllium	**0.79**		0.23	0.055	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Boron	**19**		2.9	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Cadmium	**0.25**	**B**	0.12	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Calcium	**68000**	**B**	59	10	mg/Kg	☼	05/28/19 08:58	05/29/19 18:38	5
Chromium	**21**		0.59	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Cobalt	**17**		0.29	0.077	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Copper	**18**		0.59	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Iron	**47000**	**B**	57	30	mg/Kg	☼	05/29/19 17:15	05/30/19 14:09	5
Lead	**11**	**B**	0.29	0.14	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Magnesium	**30000**	**B**	5.9	2.9	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Manganese	**420**		0.59	0.085	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Nickel	**32**		0.59	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Potassium	**4200**		29	10	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Silver	**2.8**		0.29	0.076	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Sodium	**160**		59	8.7	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Thallium	**0.82**		0.59	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Vanadium	**25**		0.29	0.069	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1
Zinc	**57**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 08:58	05/28/19 21:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		05/28/19 14:38	05/29/19 09:48	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B11

Date Collected: 05/16/19 06:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-6

Matrix: Solid
Percent Solids: 84.0

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:16	1
Barium	**0.052**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:16	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:16	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:16	1
Calcium	**9.9**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:16	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:16	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:16	1
Iron	**5.2**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:16	1
Manganese	**0.025**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:16	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:16	1
Potassium	**3.9**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:16	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:16	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:16	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:16	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:55	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J B**	0.019	0.0065	mg/Kg	☼	05/28/19 15:10	05/29/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.19	mg/Kg	☼	05/29/19 14:30	05/29/19 19:04	1
pH	**8.8**		0.2	0.2	SU			05/23/19 15:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B14
Date Collected: 05/16/19 06:57
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-7
Matrix: Solid
Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Acetone	**0.0092**	**J**	0.018	0.0076	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*05/17/19 18:04*	*05/27/19 14:11*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*05/17/19 18:04*	*05/27/19 14:11*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*05/17/19 18:04*	*05/27/19 14:11*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/27/19 14:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B14
Date Collected: 05/16/19 06:57
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-7
Matrix: Solid
Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1

Client Sample ID: 2686V2-10-B14
Date Collected: 05/16/19 06:57
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-7
Matrix: Solid
Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1
Pyrene	**0.015**	**J**	0.040	0.0080	mg/Kg	☼	05/29/19 07:49	05/31/19 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*05/29/19 07:49*	*05/31/19 17:41*	*1*
2-Fluorobiphenyl	*62*		*43 - 145*	*05/29/19 07:49*	*05/31/19 17:41*	*1*
2-Fluorophenol	*85*		*31 - 166*	*05/29/19 07:49*	*05/31/19 17:41*	*1*
Nitrobenzene-d5	*58*		*37 - 147*	*05/29/19 07:49*	*05/31/19 17:41*	*1*
Phenol-d5	*87*		*30 - 153*	*05/29/19 07:49*	*05/31/19 17:41*	*1*
Terphenyl-d14	*180*	*X*	*42 - 157*	*05/29/19 07:49*	*05/31/19 17:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.80**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Arsenic	**7.3**		0.60	0.21	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Barium	**48**		0.60	0.069	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Beryllium	**0.84**		0.24	0.056	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Boron	**18**		3.0	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Cadmium	**0.27**	**B**	0.12	0.022	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Calcium	**57000**	**B**	60	10	mg/Kg	☼	05/28/19 08:58	05/29/19 18:42	5
Chromium	**22**		0.60	0.30	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Cobalt	**14**		0.30	0.079	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Copper	**20**		0.60	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Iron	**20000**	**B**	11	5.9	mg/Kg	☼	05/29/19 17:15	05/30/19 11:57	1
Lead	**12**	**B**	0.30	0.14	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Magnesium	**29000**	**B**	6.0	3.0	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Manganese	**350**		0.60	0.087	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Nickel	**36**		0.60	0.18	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Potassium	**4300**		30	11	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Silver	**2.8**		0.30	0.078	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Sodium	**160**		60	8.9	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Thallium	**1.1**		0.60	0.30	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Vanadium	**26**		0.30	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1
Zinc	**58**	**B**	1.2	0.53	mg/Kg	☼	05/28/19 08:58	05/28/19 21:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:38	05/29/19 09:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:38	05/29/19 09:52	1
Manganese	**1.7**		0.025	0.010	mg/L		05/28/19 14:38	05/29/19 09:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B14

Date Collected: 05/16/19 06:57
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-7

Matrix: Solid
Percent Solids: 82.1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:20	1
Barium	**0.15**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:20	1
Boron	**0.11**		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:20	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:20	1
Calcium	**21**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:20	1
Chromium	**0.069**		0.025	0.010	mg/L		05/29/19 07:39	05/30/19 11:42	1
Cobalt	**0.013**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:20	1
Iron	**26**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:20	1
Lead	**0.022**		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:20	1
Manganese	**0.19**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:20	1
Nickel	**0.031**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:20	1
Potassium	**13**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:20	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:20	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:20	1
Zinc	**0.066**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:20	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 18:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 18:59	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0084**	**J B**	0.020	0.0066	mg/Kg	☼	05/28/19 15:10	05/29/19 09:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/29/19 14:30	05/29/19 19:05	1
pH	**8.9**		0.2	0.2	SU			05/23/19 15:25	1

Client Sample ID: 2686V2-10-B15

Date Collected: 05/16/19 07:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-8

Matrix: Solid
Percent Solids: 87.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Acetone	**0.027**		0.019	0.0083	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/17/19 18:04*	*05/27/19 14:38*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*05/17/19 18:04*	*05/27/19 14:38*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/27/19 14:38*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/27/19 14:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1

Client Sample ID: 2686V2-10-B15

Date Collected: 05/16/19 07:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-8

Matrix: Solid
Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Chrysene	**0.013**	**J**	0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1

Client Sample ID: 2686V2-10-B15
Date Collected: 05/16/19 07:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-8
Matrix: Solid
Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1
Pyrene	**0.0099**	**J**	0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*43*		*31 - 143*	*05/29/19 07:49*	*05/30/19 19:18*	*1*
2-Fluorobiphenyl	*56*		*43 - 145*	*05/29/19 07:49*	*05/30/19 19:18*	*1*
2-Fluorophenol	*70*		*31 - 166*	*05/29/19 07:49*	*05/30/19 19:18*	*1*
Nitrobenzene-d5	*50*		*37 - 147*	*05/29/19 07:49*	*05/30/19 19:18*	*1*
Phenol-d5	*64*		*30 - 153*	*05/29/19 07:49*	*05/30/19 19:18*	*1*
Terphenyl-d14	*71*		*42 - 157*	*05/29/19 07:49*	*05/30/19 19:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.45**	**J F1 B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Arsenic	**9.3**	**F1**	0.57	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Barium	**14**		0.57	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Beryllium	**0.46**		0.23	0.053	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Boron	**13**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Cadmium	**0.42**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Calcium	**91000**	**B**	57	9.6	mg/Kg	☼	05/28/19 08:58	05/29/19 18:46	5
Chromium	**9.7**		0.57	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Cobalt	**10**		0.28	0.074	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Copper	**23**		0.57	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Iron	**13000**	**B**	11	5.9	mg/Kg	☼	05/29/19 17:15	05/30/19 12:01	1
Lead	**13**	**F1 F2 B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Magnesium	**53000**	**F2 B**	28	14	mg/Kg	☼	05/28/19 08:58	05/29/19 18:46	5
Manganese	**710**	**F2**	0.57	0.082	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Nickel	**25**		0.57	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Potassium	**2100**	**F1**	28	10	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Selenium	**0.45**	**J F1**	0.57	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Silver	**1.2**		0.28	0.073	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Sodium	**190**		57	8.4	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Thallium	**0.48**	**J**	0.57	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Vanadium	**14**		0.28	0.067	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1
Zinc	**84**	**F1 B**	1.1	0.50	mg/Kg	☼	05/28/19 08:58	05/28/19 21:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:38	05/29/19 09:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:38	05/29/19 09:56	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B15

Date Collected: 05/16/19 07:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-8

Matrix: Solid
Percent Solids: 87.2

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.011**	**J**	0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:24	1
Barium	**0.080**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:24	1
Boron	**0.088**	**J**	0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:24	1
Calcium	**12**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:24	1
Chromium	**0.028**		0.025	0.010	mg/L		05/29/19 07:39	05/30/19 11:46	1
Cobalt	**0.012**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:24	1
Iron	**28**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:24	1
Lead	**0.028**		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:24	1
Manganese	**0.12**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:24	1
Nickel	**0.032**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:24	1
Potassium	**7.6**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:24	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:24	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:24	1
Zinc	**0.20**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:24	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:03	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**B**	0.017	0.0058	mg/Kg	☼	05/28/19 15:10	05/29/19 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.44		0.44	0.15	mg/Kg	☼	05/29/19 14:30	05/29/19 19:05	1
pH	**8.8**		0.2	0.2	SU			05/23/19 15:31	1

Client Sample ID: 2686V2-10-B13-1

Date Collected: 05/16/19 07:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-9

Matrix: Solid
Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/17/19 18:04*	*05/27/19 15:04*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/17/19 18:04*	*05/27/19 15:04*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/27/19 15:04*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/27/19 15:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B13-1
Date Collected: 05/16/19 07:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-9
Matrix: Solid
Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1

Client Sample ID: 2686V2-10-B13-1
Date Collected: 05/16/19 07:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-9
Matrix: Solid
Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	05/29/19 07:49	05/30/19 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*39*		*31 - 143*	*05/29/19 07:49*	*05/30/19 19:44*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 07:49*	*05/30/19 19:44*	*1*
2-Fluorophenol	*77*		*31 - 166*	*05/29/19 07:49*	*05/30/19 19:44*	*1*
Nitrobenzene-d5	*52*		*37 - 147*	*05/29/19 07:49*	*05/30/19 19:44*	*1*
Phenol-d5	*70*		*30 - 153*	*05/29/19 07:49*	*05/30/19 19:44*	*1*
Terphenyl-d14	*70*		*42 - 157*	*05/29/19 07:49*	*05/30/19 19:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.74**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Arsenic	**3.6**		0.56	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Barium	**59**		0.56	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Beryllium	**0.79**		0.22	0.052	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Boron	**19**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Cadmium	**0.25**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Calcium	**64000**	**B**	56	9.5	mg/Kg	☼	05/28/19 08:58	05/29/19 19:15	5
Chromium	**22**	**^**	0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Cobalt	**13**		0.28	0.073	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Copper	**17**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Iron	**18000**	**B**	12	6.0	mg/Kg	☼	05/29/19 17:15	05/30/19 12:05	1
Lead	**11**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Magnesium	**29000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Manganese	**410**		0.56	0.081	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Nickel	**32**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Potassium	**4100**		28	9.9	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Silver	**2.8**		0.28	0.072	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Sodium	**170**		56	8.3	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Thallium	**0.77**		0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Vanadium	**26**		0.28	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1
Zinc	**59**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 08:58	05/28/19 22:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:38	05/29/19 10:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:38	05/29/19 10:08	1
Manganese	**1.8**		0.025	0.010	mg/L		05/28/19 14:38	05/29/19 10:08	1

Client Sample ID: 2686V2-10-B13-1 **Lab Sample ID: 500-163561-9**
Date Collected: 05/16/19 07:05 **Matrix: Solid**
Date Received: 05/17/19 11:15 **Percent Solids: 81.3**

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:28	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:28	1
Boron	**0.12**		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:28	1
Calcium	**27**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:28	1
Chromium	**0.044**		0.025	0.010	mg/L		05/29/19 07:39	05/30/19 11:50	1
Cobalt	**0.016**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:28	1
Iron	**30**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:28	1
Lead	**0.026**		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:28	1
Manganese	**0.23**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:28	1
Nickel	**0.038**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:28	1
Potassium	**13**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:28	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:28	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:28	1
Zinc	**0.084**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:28	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:15	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 08:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J B**	0.020	0.0067	mg/Kg	☼	05/28/19 15:10	05/29/19 09:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	05/29/19 14:30	05/29/19 19:05	1
pH	**8.8**		0.2	0.2	SU			05/23/19 15:37	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B13-2
Date Collected: 05/16/19 07:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-10
Matrix: Solid
Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Acetone	**0.019**		0.015	0.0067	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/17/19 18:04*	*05/27/19 15:30*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*05/17/19 18:04*	*05/27/19 15:30*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/27/19 15:30*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/27/19 15:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1

Client Sample ID: 2686V2-10-B13-2
Date Collected: 05/16/19 07:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-10
Matrix: Solid
Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Benzo[a]pyrene	**0.011**	**J**	0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Chrysene	**0.020**	**J**	0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B13-2

Date Collected: 05/16/19 07:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-10

Matrix: Solid
Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Phenanthrene	**0.012**	**J**	0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1
Pyrene	**0.011**	**J**	0.038	0.0077	mg/Kg	☼	05/29/19 07:49	05/30/19 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*44*		*31 - 143*	*05/29/19 07:49*	*05/30/19 20:10*	*1*
2-Fluorobiphenyl	*59*		*43 - 145*	*05/29/19 07:49*	*05/30/19 20:10*	*1*
2-Fluorophenol	*73*		*31 - 166*	*05/29/19 07:49*	*05/30/19 20:10*	*1*
Nitrobenzene-d5	*54*		*37 - 147*	*05/29/19 07:49*	*05/30/19 20:10*	*1*
Phenol-d5	*66*		*30 - 153*	*05/29/19 07:49*	*05/30/19 20:10*	*1*
Terphenyl-d14	*71*		*42 - 157*	*05/29/19 07:49*	*05/30/19 20:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.71**	**J B**	1.1	0.21	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Arsenic	**6.3**		0.55	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Barium	**50**		0.55	0.062	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Beryllium	**0.78**		0.22	0.051	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Boron	**22**		2.7	0.25	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Cadmium	**0.28**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Calcium	**72000**	**B**	55	9.2	mg/Kg	☼	05/28/19 08:58	05/29/19 19:19	5
Chromium	**21**	**^**	0.55	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Cobalt	**13**		0.27	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Copper	**20**		0.55	0.15	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Iron	**17000**	**B**	11	5.9	mg/Kg	☼	05/29/19 17:15	05/30/19 12:09	1
Lead	**12**	**B**	0.27	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Magnesium	**30000**	**B**	5.5	2.7	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Manganese	**400**		0.55	0.079	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Nickel	**32**		0.55	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Potassium	**4700**		27	9.6	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Silver	**2.3**		0.27	0.070	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Sodium	**220**		55	8.1	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Thallium	**0.91**		0.55	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Vanadium	**25**		0.27	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1
Zinc	**57**	**B**	1.1	0.48	mg/Kg	☼	05/28/19 08:58	05/28/19 22:29	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:32	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:32	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:32	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B13-2
Date Collected: 05/16/19 07:10
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-10
Matrix: Solid
Percent Solids: 85.7

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:32	1
Calcium	**18**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:32	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:32	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:32	1
Iron	<0.40		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:32	1
Manganese	**0.012**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:32	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:32	1
Potassium	**1.6**	**J**	2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:32	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:32	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:32	1
Zinc	**0.052**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:32	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:20	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J B**	0.018	0.0059	mg/Kg	☼	05/28/19 15:10	05/29/19 09:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.42		0.42	0.14	mg/Kg	☼	05/29/19 14:30	05/29/19 19:06	1
pH	**8.5**		0.2	0.2	SU			05/23/19 15:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-1
Date Collected: 05/16/19 07:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-11
Matrix: Solid
Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00088	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,2-Dichloropropane	<0.0020		0.0020	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00072	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Acetone	**0.034**		0.020	0.0089	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Bromodichloromethane	<0.0020		0.0020	0.00042	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Bromoform	<0.0020		0.0020	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Chloroform	<0.0020		0.0020	0.00071	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00062	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Dibromochloromethane	<0.0020		0.0020	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Ethylbenzene	<0.0020		0.0020	0.00098	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Styrene	<0.0020		0.0020	0.00062	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Tetrachloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Toluene	<0.0020		0.0020	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00072	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/17/19 18:04*	*05/27/19 15:56*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*05/17/19 18:04*	*05/27/19 15:56*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/27/19 15:56*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/17/19 18:04*	*05/27/19 15:56*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1

Client Sample ID: 2686V2-10-B10-1
Date Collected: 05/16/19 07:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-11
Matrix: Solid
Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-1
Date Collected: 05/16/19 07:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-11
Matrix: Solid
Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1
Pyrene	**0.0084**	**J**	0.040	0.0080	mg/Kg	☼	05/29/19 07:49	05/30/19 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*41*		*31 - 143*	*05/29/19 07:49*	*05/30/19 20:37*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*05/29/19 07:49*	*05/30/19 20:37*	*1*
2-Fluorophenol	*70*		*31 - 166*	*05/29/19 07:49*	*05/30/19 20:37*	*1*
Nitrobenzene-d5	*51*		*37 - 147*	*05/29/19 07:49*	*05/30/19 20:37*	*1*
Phenol-d5	*60*		*30 - 153*	*05/29/19 07:49*	*05/30/19 20:37*	*1*
Terphenyl-d14	*69*		*42 - 157*	*05/29/19 07:49*	*05/30/19 20:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.77**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Arsenic	**4.1**		0.59	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Barium	**48**		0.59	0.067	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Beryllium	**0.79**		0.24	0.055	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Boron	**18**		2.9	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Cadmium	**0.26**	**B**	0.12	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Calcium	**61000**	**B**	59	10	mg/Kg	☼	05/28/19 08:58	05/29/19 19:23	5
Chromium	**21**	**^**	0.59	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Cobalt	**13**		0.29	0.077	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Copper	**19**		0.59	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Iron	**18000**	**B**	12	6.2	mg/Kg	☼	05/29/19 17:15	05/30/19 12:13	1
Lead	**12**	**B**	0.29	0.14	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Magnesium	**28000**	**B**	5.9	2.9	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Manganese	**340**		0.59	0.085	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Nickel	**34**		0.59	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Potassium	**4100**		29	10	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Selenium	**0.41**	**J**	0.59	0.35	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Silver	**2.8**		0.29	0.076	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Sodium	**160**		59	8.7	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Thallium	**1.0**		0.59	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Vanadium	**29**		0.29	0.069	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1
Zinc	**65**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 08:58	05/28/19 22:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:38	05/29/19 10:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:38	05/29/19 10:17	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-1

Date Collected: 05/16/19 07:15
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-11

Matrix: Solid
Percent Solids: 80.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:36	1
Barium	**0.12**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:36	1
Boron	**0.071**	**J**	0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:36	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:36	1
Calcium	**15**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:36	1
Chromium	**0.025**		0.025	0.010	mg/L		05/29/19 07:39	05/30/19 11:54	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:36	1
Iron	**18**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:36	1
Lead	**0.018**		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:36	1
Manganese	**0.11**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:36	1
Nickel	**0.022**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:36	1
Potassium	**9.8**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:36	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:36	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:36	1
Zinc	**0.061**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:36	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:24	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0091**	**J B**	0.020	0.0065	mg/Kg	☼	05/28/19 15:10	05/29/19 09:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	05/29/19 14:30	05/29/19 19:06	1
pH	**8.8**		0.2	0.2	SU			05/23/19 15:49	1

Client Sample ID: 2686V2-10-B10-2
Date Collected: 05/16/19 07:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-13
Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Acetone	**0.022**		0.016	0.0068	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/17/19 18:04*	*05/27/19 16:48*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*05/17/19 18:04*	*05/27/19 16:48*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/17/19 18:04*	*05/27/19 16:48*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/17/19 18:04*	*05/27/19 16:48*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-2
Date Collected: 05/16/19 07:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-13
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-2
Date Collected: 05/16/19 07:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-13
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Phenanthrene	**0.011**	**J**	0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1
Pyrene	**0.0099**	**J**	0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*44*		*31 - 143*	*05/29/19 07:49*	*05/30/19 21:03*	*1*
2-Fluorobiphenyl	*52*		*43 - 145*	*05/29/19 07:49*	*05/30/19 21:03*	*1*
2-Fluorophenol	*64*		*31 - 166*	*05/29/19 07:49*	*05/30/19 21:03*	*1*
Nitrobenzene-d5	*46*		*37 - 147*	*05/29/19 07:49*	*05/30/19 21:03*	*1*
Phenol-d5	*58*		*30 - 153*	*05/29/19 07:49*	*05/30/19 21:03*	*1*
Terphenyl-d14	*71*		*42 - 157*	*05/29/19 07:49*	*05/30/19 21:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.71**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Arsenic	**6.3**		0.56	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Barium	**49**		0.56	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Beryllium	**0.68**		0.22	0.052	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Boron	**19**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Cadmium	**0.22**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Calcium	**79000**	**B**	56	9.5	mg/Kg	☼	05/28/19 08:58	05/29/19 19:27	5
Chromium	**19**	**^**	0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Cobalt	**13**		0.28	0.073	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Copper	**20**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Iron	**16000**	**B ^**	11	5.7	mg/Kg	☼	05/29/19 17:15	05/30/19 12:25	1
Lead	**11**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Magnesium	**33000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Manganese	**440**		0.56	0.081	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Nickel	**31**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Potassium	**4000**		28	9.9	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Silver	**2.2**		0.28	0.072	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Sodium	**200**		56	8.3	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Thallium	**0.91**		0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Vanadium	**22**		0.28	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1
Zinc	**48**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 08:58	05/28/19 22:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:40	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:40	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:40	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-2
Date Collected: 05/16/19 07:20
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-13
Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:40	1
Calcium	**21**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:40	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:40	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:40	1
Iron	**0.26**	**J**	0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:40	1
Manganese	**0.024**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:40	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:40	1
Potassium	**1.6**	**J**	2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:40	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:40	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:40	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:40	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:28	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J B**	0.018	0.0060	mg/Kg	☼	05/28/19 15:10	05/29/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/29/19 14:30	05/29/19 19:07	1
pH	**8.1**		0.2	0.2	SU			05/23/19 15:56	1

Client Sample ID: 2686V2-10-B10-2 Dup

Date Collected: 05/16/19 07:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-14

Matrix: Solid
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Acetone	**0.015**		0.015	0.0066	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/27/19 17:14*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/17/19 18:04*	*05/27/19 17:14*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/17/19 18:04*	*05/27/19 17:14*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/27/19 17:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-2 Dup
Date Collected: 05/16/19 07:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-14
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2-Methylnaphthalene	**0.0078**	**J**	0.075	0.0068	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-2 Dup

Date Collected: 05/16/19 07:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-14

Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Phenanthrene	**0.013**	**J**	0.037	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*43*		*31 - 143*	*05/29/19 07:49*	*05/30/19 21:29*	*1*
2-Fluorobiphenyl	*53*		*43 - 145*	*05/29/19 07:49*	*05/30/19 21:29*	*1*
2-Fluorophenol	*67*		*31 - 166*	*05/29/19 07:49*	*05/30/19 21:29*	*1*
Nitrobenzene-d5	*49*		*37 - 147*	*05/29/19 07:49*	*05/30/19 21:29*	*1*
Phenol-d5	*66*		*30 - 153*	*05/29/19 07:49*	*05/30/19 21:29*	*1*
Terphenyl-d14	*72*		*42 - 157*	*05/29/19 07:49*	*05/30/19 21:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.83**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Arsenic	**4.9**		0.56	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Barium	**48**		0.56	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Beryllium	**0.79**		0.22	0.053	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Boron	**22**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Cadmium	**0.24**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Calcium	**73000**	**B**	56	9.5	mg/Kg	☼	05/28/19 08:58	05/29/19 19:31	5
Chromium	**21**	**^**	0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Cobalt	**13**		0.28	0.074	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Copper	**19**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Iron	**17000**	**B ^**	11	5.5	mg/Kg	☼	05/29/19 17:15	05/30/19 12:29	1
Lead	**11**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Magnesium	**31000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Manganese	**400**		0.56	0.082	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Nickel	**32**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Potassium	**4700**		28	10	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Silver	**2.2**		0.28	0.073	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Sodium	**230**		56	8.3	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Thallium	**0.93**		0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Vanadium	**25**		0.28	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1
Zinc	**51**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 08:58	05/28/19 22:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:44	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:44	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:44	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B10-2 Dup
Date Collected: 05/16/19 07:25
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-14
Matrix: Solid
Percent Solids: 85.9

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:44	1
Calcium	**19**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:44	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:44	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:44	1
Iron	**0.21**	**J**	0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:44	1
Manganese	**0.017**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:44	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:44	1
Potassium	**1.7**	**J**	2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:44	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:44	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:44	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:44	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:32	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J B**	0.018	0.0059	mg/Kg	☼	05/28/19 15:10	05/29/19 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	05/29/19 14:30	05/29/19 19:08	1
pH	**8.4**		0.2	0.2	SU			05/23/19 16:02	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-1
Date Collected: 05/16/19 07:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-15
Matrix: Solid
Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Acetone	**0.015**	**J**	0.018	0.0078	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Methylene Chloride	**0.0025**	**J**	0.0045	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/27/19 17:40*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 131*	*05/17/19 18:04*	*05/27/19 17:40*	*1*
Dibromofluoromethane	*100*		*75 - 126*	*05/17/19 18:04*	*05/27/19 17:40*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/17/19 18:04*	*05/27/19 17:40*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1

Client Sample ID: 2686V2-10-B07-1
Date Collected: 05/16/19 07:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-15
Matrix: Solid
Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1

Client Sample ID: 2686V2-10-B07-1
Date Collected: 05/16/19 07:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-15
Matrix: Solid
Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	05/29/19 07:49	05/30/19 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*38*		*31 - 143*	*05/29/19 07:49*	*05/30/19 21:55*	*1*
2-Fluorobiphenyl	*49*		*43 - 145*	*05/29/19 07:49*	*05/30/19 21:55*	*1*
2-Fluorophenol	*60*		*31 - 166*	*05/29/19 07:49*	*05/30/19 21:55*	*1*
Nitrobenzene-d5	*43*		*37 - 147*	*05/29/19 07:49*	*05/30/19 21:55*	*1*
Phenol-d5	*56*		*30 - 153*	*05/29/19 07:49*	*05/30/19 21:55*	*1*
Terphenyl-d14	*68*		*42 - 157*	*05/29/19 07:49*	*05/30/19 21:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.66**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Arsenic	**2.8**		0.60	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Barium	**56**		0.60	0.068	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Beryllium	**0.80**		0.24	0.056	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Boron	**18**		3.0	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Cadmium	**0.32**	**B**	0.12	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Calcium	**34000**	**B**	12	2.0	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Chromium	**25**	**^**	0.60	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Cobalt	**8.1**		0.30	0.078	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Copper	**18**		0.60	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Iron	**16000**	**B ^**	12	6.4	mg/Kg	☼	05/29/19 17:15	05/30/19 12:33	1
Lead	**17**	**B**	0.30	0.14	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Magnesium	**21000**	**B**	6.0	3.0	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Manganese	**240**		0.60	0.086	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Nickel	**29**		0.60	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Potassium	**4100**		30	11	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Selenium	**0.69**		0.60	0.35	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Silver	**3.1**		0.30	0.077	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Sodium	**130**		60	8.8	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Thallium	**1.2**		0.60	0.30	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Vanadium	**27**		0.30	0.070	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1
Zinc	**65**	**B**	1.2	0.52	mg/Kg	☼	05/28/19 08:58	05/28/19 22:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:48	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:48	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-1
Date Collected: 05/16/19 07:30
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-15
Matrix: Solid
Percent Solids: 80.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:48	1
Calcium	**12**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:48	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:48	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:48	1
Iron	**1.8**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:48	1
Manganese	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:48	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:48	1
Potassium	**2.5**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:48	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:48	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:48	1
Zinc	**0.083**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:48	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:36	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.036**	**B**	0.020	0.0067	mg/Kg	☼	05/28/19 15:10	05/29/19 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/29/19 14:30	05/29/19 19:08	1
pH	**8.4**		0.2	0.2	SU			05/23/19 16:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-2
Date Collected: 05/16/19 07:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-16
Matrix: Solid
Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Acetone	**0.013**	**J**	0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/17/19 18:04*	*05/27/19 18:06*	*1*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*05/17/19 18:04*	*05/27/19 18:06*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/17/19 18:04*	*05/27/19 18:06*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/27/19 18:06*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1

Client Sample ID: 2686V2-10-B07-2
Date Collected: 05/16/19 07:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-16
Matrix: Solid
Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Chrysene	**0.011**	**J**	0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-2
Date Collected: 05/16/19 07:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-16
Matrix: Solid
Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	05/29/19 07:49	05/30/19 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*38*		*31 - 143*	*05/29/19 07:49*	*05/30/19 22:21*	*1*
2-Fluorobiphenyl	*50*		*43 - 145*	*05/29/19 07:49*	*05/30/19 22:21*	*1*
2-Fluorophenol	*61*		*31 - 166*	*05/29/19 07:49*	*05/30/19 22:21*	*1*
Nitrobenzene-d5	*43*		*37 - 147*	*05/29/19 07:49*	*05/30/19 22:21*	*1*
Phenol-d5	*51*		*30 - 153*	*05/29/19 07:49*	*05/30/19 22:21*	*1*
Terphenyl-d14	*70*		*42 - 157*	*05/29/19 07:49*	*05/30/19 22:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.85**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Arsenic	**3.6**		0.58	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Barium	**42**		0.58	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Beryllium	**0.78**		0.23	0.054	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Boron	**20**		2.9	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Cadmium	**0.29**	**B**	0.12	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Calcium	**73000**	**B**	58	9.8	mg/Kg	☼	05/28/19 08:58	05/29/19 19:35	5
Chromium	**20**	**^**	0.58	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Cobalt	**8.2**		0.29	0.076	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Copper	**20**		0.58	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Iron	**18000**	**B ^**	11	5.9	mg/Kg	☼	05/29/19 17:15	05/30/19 12:37	1
Lead	**11**	**B**	0.29	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Magnesium	**32000**	**B**	5.8	2.9	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Manganese	**340**		0.58	0.084	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Nickel	**30**		0.58	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Potassium	**4500**		29	10	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Silver	**2.6**		0.29	0.075	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Sodium	**180**		58	8.6	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Thallium	**1.1**		0.58	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Vanadium	**24**		0.29	0.068	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1
Zinc	**60**	**B**	1.2	0.51	mg/Kg	☼	05/28/19 08:58	05/28/19 22:50	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 18:52	1
Barium	**0.050**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 18:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 18:52	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 18:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-2
Date Collected: 05/16/19 07:35
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-16
Matrix: Solid
Percent Solids: 85.0

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 18:52	1
Calcium	**9.1**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:52	1
Chromium	<0.025	^	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:52	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:52	1
Iron	**3.6**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 18:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 18:52	1
Manganese	**0.020**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:52	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:52	1
Potassium	**4.0**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 18:52	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 18:52	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 18:52	1
Zinc	**0.034**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 18:52	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:40	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0088**	**J B**	0.018	0.0059	mg/Kg	☼	05/28/19 15:10	05/29/19 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	05/29/19 14:30	05/29/19 19:08	1
pH	**8.6**		0.2	0.2	SU			05/23/19 16:14	1

Client Sample ID: 2686V2-10-B07-2 Dup

Date Collected: 05/16/19 07:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-17

Matrix: Solid
Percent Solids: 85.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/27/19 18:32*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*05/17/19 18:04*	*05/27/19 18:32*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/17/19 18:04*	*05/27/19 18:32*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/17/19 18:04*	*05/27/19 18:32*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1

Client Sample ID: 2686V2-10-B07-2 Dup

Date Collected: 05/16/19 07:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-17

Matrix: Solid
Percent Solids: 85.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Chrysene	**0.012**	**J**	0.038	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-2 Dup

Date Collected: 05/16/19 07:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-17

Matrix: Solid
Percent Solids: 85.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1
Pyrene	**0.015**	**J**	0.038	0.0077	mg/Kg	☼	05/29/19 07:49	05/31/19 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*45*		*31 - 143*	*05/29/19 07:49*	*05/31/19 14:20*	*1*
2-Fluorobiphenyl	*53*		*43 - 145*	*05/29/19 07:49*	*05/31/19 14:20*	*1*
2-Fluorophenol	*72*		*31 - 166*	*05/29/19 07:49*	*05/31/19 14:20*	*1*
Nitrobenzene-d5	*49*		*37 - 147*	*05/29/19 07:49*	*05/31/19 14:20*	*1*
Phenol-d5	*68*		*30 - 153*	*05/29/19 07:49*	*05/31/19 14:20*	*1*
Terphenyl-d14	*119*		*42 - 157*	*05/29/19 07:49*	*05/31/19 14:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.77**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Arsenic	**7.5**		0.55	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Barium	**54**		0.55	0.063	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Beryllium	**0.74**		0.22	0.052	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Boron	**20**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Cadmium	**0.29**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Calcium	**74000**	**B**	55	9.4	mg/Kg	☼	05/28/19 08:58	05/29/19 19:39	5
Chromium	**19**	**^**	0.55	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Cobalt	**13**		0.28	0.073	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Copper	**20**		0.55	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Iron	**16000**	**B ^**	11	5.8	mg/Kg	☼	05/29/19 17:15	05/30/19 12:41	1
Lead	**12**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Magnesium	**32000**	**B**	5.5	2.7	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Manganese	**410**		0.55	0.080	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Nickel	**32**		0.55	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Potassium	**4300**		28	9.8	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Selenium	**0.66**		0.55	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Silver	**2.5**		0.28	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Sodium	**180**		55	8.2	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Thallium	**0.84**		0.55	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Vanadium	**25**		0.28	0.065	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1
Zinc	**62**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 08:58	05/28/19 22:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 19:04	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 19:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 19:04	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 19:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B07-2 Dup
Date Collected: 05/16/19 07:40
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-17
Matrix: Solid
Percent Solids: 85.4

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 19:04	1
Calcium	**8.9**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:04	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:04	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:04	1
Iron	**2.6**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 19:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 19:04	1
Manganese	**0.014**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:04	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:04	1
Potassium	**2.8**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:04	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 19:04	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:04	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 19:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:44	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 10:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0094**	**J B**	0.018	0.0061	mg/Kg	☼	05/28/19 15:10	05/29/19 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/29/19 23:30	05/30/19 12:35	1
pH	**8.5**		0.2	0.2	SU			05/23/19 16:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-1
Date Collected: 05/16/19 07:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-18
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/27/19 18:58*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*05/17/19 18:04*	*05/27/19 18:58*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/17/19 18:04*	*05/27/19 18:58*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/27/19 18:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-1
Date Collected: 05/16/19 07:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-18
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-1

Date Collected: 05/16/19 07:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-18

Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/29/19 07:49	05/31/19 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*41*		*31 - 143*	*05/29/19 07:49*	*05/31/19 15:46*	*1*
2-Fluorobiphenyl	*49*		*43 - 145*	*05/29/19 07:49*	*05/31/19 15:46*	*1*
2-Fluorophenol	*69*		*31 - 166*	*05/29/19 07:49*	*05/31/19 15:46*	*1*
Nitrobenzene-d5	*46*		*37 - 147*	*05/29/19 07:49*	*05/31/19 15:46*	*1*
Phenol-d5	*65*		*30 - 153*	*05/29/19 07:49*	*05/31/19 15:46*	*1*
Terphenyl-d14	*108*		*42 - 157*	*05/29/19 07:49*	*05/31/19 15:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.68**	**J B**	1.1	0.22	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Arsenic	**5.4**		0.56	0.19	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Barium	**48**		0.56	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Beryllium	**0.89**		0.23	0.053	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Boron	**18**		2.8	0.26	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Cadmium	**0.21**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Calcium	**26000**	**B**	11	1.9	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Chromium	**24**	**^**	0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Cobalt	**8.3**		0.28	0.074	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Copper	**18**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Iron	**17000**	**B ^**	11	5.9	mg/Kg	☼	05/29/19 17:15	05/30/19 12:45	1
Lead	**13**	**B**	0.28	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Magnesium	**20000**	**B**	5.6	2.8	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Manganese	**200**		0.56	0.082	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Nickel	**29**		0.56	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Potassium	**4300**		28	10	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Selenium	**0.39**	**J**	0.56	0.33	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Silver	**3.0**		0.28	0.073	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Sodium	**130**		56	8.3	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Thallium	**1.2**		0.56	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Vanadium	**29**		0.28	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1
Zinc	**70**	**B**	1.1	0.49	mg/Kg	☼	05/28/19 08:58	05/28/19 23:06	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 19:08	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 19:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 19:08	1
Boron	**0.070**	**J**	0.10	0.050	mg/L		05/29/19 07:39	05/29/19 19:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-1
Date Collected: 05/16/19 07:45
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-18
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 19:08	1
Calcium	**10**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:08	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:08	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:08	1
Iron	**1.5**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 19:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 19:08	1
Manganese	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:08	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:08	1
Potassium	**1.7**	**J**	2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:08	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 19:08	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:08	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 19:08	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:49	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 11:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J B**	0.019	0.0065	mg/Kg	☼	05/28/19 15:10	05/29/19 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/29/19 23:30	05/30/19 12:35	1
pH	**8.5**		0.2	0.2	SU			05/23/19 16:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-2
Date Collected: 05/16/19 07:47
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-19
Matrix: Solid
Percent Solids: 85.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Methylene Chloride	**0.0020**	**J**	0.0038	0.0015	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	05/17/19 18:04	05/27/19 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/27/19 19:24*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*05/17/19 18:04*	*05/27/19 19:24*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/17/19 18:04*	*05/27/19 19:24*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/27/19 19:24*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1

Client Sample ID: 2686V2-10-B08-2
Date Collected: 05/16/19 07:47
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-19
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.088	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Benzo[g,h,i]perylene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-2
Date Collected: 05/16/19 07:47
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-19
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Phenanthrene	**0.017**	**J**	0.039	0.0054	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1
Pyrene	**0.0094**	**J**	0.039	0.0077	mg/Kg	☼	05/29/19 07:49	05/31/19 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*40*		*31 - 143*	*05/29/19 07:49*	*05/31/19 16:15*	*1*
2-Fluorobiphenyl	*48*		*43 - 145*	*05/29/19 07:49*	*05/31/19 16:15*	*1*
2-Fluorophenol	*65*		*31 - 166*	*05/29/19 07:49*	*05/31/19 16:15*	*1*
Nitrobenzene-d5	*44*		*37 - 147*	*05/29/19 07:49*	*05/31/19 16:15*	*1*
Phenol-d5	*58*		*30 - 153*	*05/29/19 07:49*	*05/31/19 16:15*	*1*
Terphenyl-d14	*102*		*42 - 157*	*05/29/19 07:49*	*05/31/19 16:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.58**	**J B**	1.1	0.21	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Arsenic	**3.4**		0.54	0.18	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Barium	**43**		0.54	0.062	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Beryllium	**0.75**		0.22	0.050	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Boron	**20**		2.7	0.25	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Calcium	**69000**	**B**	54	9.2	mg/Kg	☼	05/28/19 08:58	05/29/19 19:43	5
Chromium	**21**	**^**	0.54	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Cobalt	**14**		0.27	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Copper	**20**		0.54	0.15	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Iron	**17000**	**B ^**	11	5.8	mg/Kg	☼	05/29/19 17:15	05/30/19 12:49	1
Lead	**11**	**B**	0.27	0.12	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Magnesium	**30000**	**B**	5.4	2.7	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Manganese	**380**		0.54	0.078	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Nickel	**34**		0.54	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Potassium	**4500**		27	9.6	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Selenium	**0.40**	**J**	0.54	0.32	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Silver	**2.5**		0.27	0.070	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Sodium	**190**		54	8.0	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Thallium	**1.1**		0.54	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Vanadium	**25**		0.27	0.064	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1
Zinc	**55**	**B**	1.1	0.47	mg/Kg	☼	05/28/19 08:58	05/28/19 23:10	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 19:12	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 19:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 19:12	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 19:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B08-2
Date Collected: 05/16/19 07:47
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-19
Matrix: Solid
Percent Solids: 85.5

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 19:12	1
Calcium	**11**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:12	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:12	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:12	1
Iron	**1.7**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 19:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 19:12	1
Manganese	**0.014**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:12	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:12	1
Potassium	**2.6**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:12	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 19:12	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:12	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 19:12	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/29/19 19:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/29/19 19:53	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 11:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0069**	**J B**	0.019	0.0062	mg/Kg	☼	05/28/19 15:10	05/29/19 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.42		0.42	0.15	mg/Kg	☼	05/29/19 23:30	05/30/19 12:36	1
pH	**8.6**		0.2	0.2	SU			05/23/19 16:33	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B12-1
Date Collected: 05/16/19 07:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-20
Matrix: Solid
Percent Solids: 79.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/17/19 18:04*	*05/28/19 12:40*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*05/17/19 18:04*	*05/28/19 12:40*	*1*
Dibromofluoromethane	*99*		*75 - 126*	*05/17/19 18:04*	*05/28/19 12:40*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/28/19 12:40*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1

Client Sample ID: 2686V2-10-B12-1
Date Collected: 05/16/19 07:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-20
Matrix: Solid
Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1

Client Sample ID: 2686V2-10-B12-1

Date Collected: 05/16/19 07:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-20

Matrix: Solid
Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Phenanthrene	<0.042		0.042	0.0059	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1
Pyrene	<0.042		0.042	0.0084	mg/Kg	☼	05/29/19 07:49	05/31/19 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*44*		*31 - 143*	*05/29/19 07:49*	*05/31/19 16:44*	*1*
2-Fluorobiphenyl	*44*		*43 - 145*	*05/29/19 07:49*	*05/31/19 16:44*	*1*
2-Fluorophenol	*63*		*31 - 166*	*05/29/19 07:49*	*05/31/19 16:44*	*1*
Nitrobenzene-d5	*41*		*37 - 147*	*05/29/19 07:49*	*05/31/19 16:44*	*1*
Phenol-d5	*60*		*30 - 153*	*05/29/19 07:49*	*05/31/19 16:44*	*1*
Terphenyl-d14	*113*		*42 - 157*	*05/29/19 07:49*	*05/31/19 16:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.77**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Arsenic	**5.1**		0.60	0.21	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Barium	**47**		0.60	0.069	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Beryllium	**0.76**		0.24	0.056	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Boron	**18**		3.0	0.28	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Cadmium	**0.23**	**B**	0.12	0.022	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Calcium	**74000**	**B**	60	10	mg/Kg	☼	05/28/19 08:58	05/29/19 19:55	5
Chromium	**20**	**^**	0.60	0.30	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Cobalt	**14**		0.30	0.079	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Copper	**20**		0.60	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Iron	**22000**	**B ^**	12	6.3	mg/Kg	☼	05/29/19 17:15	05/30/19 13:13	1
Lead	**12**	**B**	0.30	0.14	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Magnesium	**30000**	**B**	6.0	3.0	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Manganese	**370**		0.60	0.088	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Nickel	**34**		0.60	0.18	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Potassium	**4100**		30	11	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Silver	**3.3**		0.30	0.078	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Sodium	**160**		60	8.9	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Thallium	**1.0**		0.60	0.30	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Vanadium	**24**		0.30	0.071	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1
Zinc	**61**	**B**	1.2	0.53	mg/Kg	☼	05/28/19 08:58	05/28/19 23:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:38	05/29/19 10:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:38	05/29/19 10:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B12-1
Date Collected: 05/16/19 07:50
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-20
Matrix: Solid
Percent Solids: 79.0

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 19:16	1
Barium	**0.096**	**J**	0.50	0.050	mg/L		05/29/19 07:39	05/29/19 19:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 19:16	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 19:16	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 19:16	1
Calcium	**17**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:16	1
Chromium	**0.021**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:16	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:16	1
Iron	**17**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 19:16	1
Lead	**0.015**		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 19:16	1
Manganese	**0.085**		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:16	1
Nickel	**0.019**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:16	1
Potassium	**7.4**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:16	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 19:16	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:16	1
Zinc	**0.051**	**J**	0.50	0.020	mg/L		05/29/19 07:39	05/29/19 19:16	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/30/19 12:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/30/19 12:41	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 11:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**	**B**	0.021	0.0069	mg/Kg	☼	05/28/19 15:10	05/29/19 09:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.54		0.54	0.19	mg/Kg	☼	05/29/19 23:30	05/30/19 12:36	1
pH	**8.4**		0.2	0.2	SU			05/23/19 16:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B12-2
Date Collected: 05/16/19 07:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-21
Matrix: Solid
Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/17/19 18:04*	*05/28/19 13:06*	*1*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/17/19 18:04*	*05/28/19 13:06*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/17/19 18:04*	*05/28/19 13:06*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/28/19 13:06*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1

Client Sample ID: 2686V2-10-B12-2
Date Collected: 05/16/19 07:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-21
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1

Client Sample ID: 2686V2-10-B12-2
Date Collected: 05/16/19 07:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-21
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Phenanthrene	**0.0068**	**J**	0.039	0.0055	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1
Pyrene	**0.015**	**J**	0.039	0.0078	mg/Kg	☼	05/29/19 07:49	05/31/19 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*48*		*31 - 143*	*05/29/19 07:49*	*05/31/19 17:13*	*1*
2-Fluorobiphenyl	*55*		*43 - 145*	*05/29/19 07:49*	*05/31/19 17:13*	*1*
2-Fluorophenol	*73*		*31 - 166*	*05/29/19 07:49*	*05/31/19 17:13*	*1*
Nitrobenzene-d5	*51*		*37 - 147*	*05/29/19 07:49*	*05/31/19 17:13*	*1*
Phenol-d5	*71*		*30 - 153*	*05/29/19 07:49*	*05/31/19 17:13*	*1*
Terphenyl-d14	*122*		*42 - 157*	*05/29/19 07:49*	*05/31/19 17:13*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.68**	**J B**	1.2	0.23	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Arsenic	**2.4**		0.58	0.20	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Barium	**52**		0.58	0.066	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Beryllium	**0.78**		0.23	0.054	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Boron	**20**		2.9	0.27	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Cadmium	**0.23**	**B**	0.12	0.021	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Calcium	**75000**	**B**	58	9.8	mg/Kg	☼	05/28/19 08:58	05/29/19 20:00	5
Chromium	**21**	**^**	0.58	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Cobalt	**13**		0.29	0.076	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Copper	**19**		0.58	0.16	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Iron	**17000**	**B ^**	11	5.9	mg/Kg	☼	05/29/19 17:15	05/30/19 13:17	1
Lead	**11**	**B**	0.29	0.13	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Magnesium	**32000**	**B**	5.8	2.9	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Manganese	**440**		0.58	0.084	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Nickel	**31**		0.58	0.17	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Potassium	**4400**		29	10	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Silver	**2.5**		0.29	0.075	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Sodium	**180**		58	8.6	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Thallium	**0.66**		0.58	0.29	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Vanadium	**25**		0.29	0.068	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1
Zinc	**54**	**B**	1.2	0.51	mg/Kg	☼	05/28/19 08:58	05/28/19 23:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/29/19 07:39	05/29/19 19:20	1
Barium	<0.50		0.50	0.050	mg/L		05/29/19 07:39	05/29/19 19:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/29/19 07:39	05/29/19 19:20	1
Boron	<0.10		0.10	0.050	mg/L		05/29/19 07:39	05/29/19 19:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B12-2
Date Collected: 05/16/19 07:55
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-21
Matrix: Solid
Percent Solids: 83.8

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/29/19 07:39	05/29/19 19:20	1
Calcium	**11**		2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:20	1
Chromium	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:20	1
Cobalt	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:20	1
Iron	**1.7**		0.40	0.20	mg/L		05/29/19 07:39	05/29/19 19:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/29/19 07:39	05/29/19 19:20	1
Manganese	**0.012**	**J**	0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:20	1
Nickel	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:20	1
Potassium	**2.0**	**J**	2.5	0.50	mg/L		05/29/19 07:39	05/29/19 19:20	1
Selenium	<0.050		0.050	0.020	mg/L		05/29/19 07:39	05/29/19 19:20	1
Silver	<0.025		0.025	0.010	mg/L		05/29/19 07:39	05/29/19 19:20	1
Zinc	<0.50		0.50	0.020	mg/L		05/29/19 07:39	05/29/19 19:20	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/29/19 07:39	05/30/19 12:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/29/19 07:39	05/30/19 12:46	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 11:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0096**	**J B**	0.019	0.0065	mg/Kg	☼	05/28/19 15:10	05/29/19 09:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.17	mg/Kg	☼	05/29/19 23:30	05/30/19 12:36	1
pH	**8.2**		0.2	0.2	SU			05/23/19 16:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B09-1
Date Collected: 05/16/19 08:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-22
Matrix: Solid
Percent Solids: 72.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00095	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
2-Butanone (MEK)	<0.0055		0.0055	0.0024	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Acetone	<0.022		0.022	0.0096	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Benzene	<0.0022		0.0022	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Carbon disulfide	<0.0055		0.0055	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Chlorobenzene	<0.0022		0.0022	0.00081	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Dibromochloromethane	<0.0022		0.0022	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00065	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Tetrachloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00098	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00077	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Vinyl chloride	<0.0022		0.0022	0.00098	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1
Xylenes, Total	<0.0044		0.0044	0.00071	mg/Kg	☼	05/17/19 18:04	05/28/19 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/17/19 18:04*	*05/28/19 13:32*	*1*
4-Bromofluorobenzene (Surr)	*111*		*75 - 131*	*05/17/19 18:04*	*05/28/19 13:32*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/17/19 18:04*	*05/28/19 13:32*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/17/19 18:04*	*05/28/19 13:32*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.23		0.23	0.049	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
1,2-Dichlorobenzene	<0.23		0.23	0.054	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
1,3-Dichlorobenzene	<0.23		0.23	0.051	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
1,4-Dichlorobenzene	<0.23		0.23	0.058	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,2'-oxybis[1-chloropropane]	<0.23		0.23	0.052	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B09-1
Date Collected: 05/16/19 08:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-22
Matrix: Solid
Percent Solids: 72.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.45		0.45	0.10	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,4,6-Trichlorophenol	<0.45		0.45	0.15	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,4-Dichlorophenol	<0.45		0.45	0.11	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,4-Dimethylphenol	<0.45		0.45	0.17	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,4-Dinitrophenol	<0.91		0.91	0.79	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,4-Dinitrotoluene	<0.23		0.23	0.072	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2,6-Dinitrotoluene	<0.23		0.23	0.089	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2-Chloronaphthalene	<0.23		0.23	0.050	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2-Chlorophenol	<0.23		0.23	0.077	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2-Methylnaphthalene	<0.091		0.091	0.0083	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2-Methylphenol	<0.23		0.23	0.072	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2-Nitroaniline	<0.23		0.23	0.061	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
2-Nitrophenol	<0.45		0.45	0.11	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
3 & 4 Methylphenol	<0.23		0.23	0.075	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
3,3'-Dichlorobenzidine	<0.23		0.23	0.063	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
3-Nitroaniline	<0.45		0.45	0.14	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4,6-Dinitro-2-methylphenol	<0.91		0.91	0.36	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4-Bromophenyl phenyl ether	<0.23		0.23	0.060	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4-Chloro-3-methylphenol	<0.45		0.45	0.15	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4-Chloroaniline	<0.91		0.91	0.21	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4-Chlorophenyl phenyl ether	<0.23		0.23	0.053	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4-Nitroaniline	<0.45		0.45	0.19	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
4-Nitrophenol	<0.91		0.91	0.43	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Acenaphthene	<0.045		0.045	0.0081	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Acenaphthylene	<0.045		0.045	0.0060	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Anthracene	<0.045		0.045	0.0075	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Benzo[a]anthracene	<0.045		0.045	0.0061	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Benzo[a]pyrene	<0.045		0.045	0.0087	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Benzo[b]fluoranthene	<0.045		0.045	0.0097	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Benzo[g,h,i]perylene	<0.045		0.045	0.015	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Benzo[k]fluoranthene	<0.045		0.045	0.013	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Bis(2-chloroethoxy)methane	<0.23		0.23	0.046	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Bis(2-chloroethyl)ether	<0.23		0.23	0.068	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Bis(2-ethylhexyl) phthalate	<0.23		0.23	0.082	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Butyl benzyl phthalate	<0.23		0.23	0.086	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Carbazole	<0.23		0.23	0.11	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Chrysene	<0.045		0.045	0.012	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Dibenz(a,h)anthracene	<0.045		0.045	0.0087	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Dibenzofuran	<0.23		0.23	0.053	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Diethyl phthalate	<0.23		0.23	0.077	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Dimethyl phthalate	<0.23		0.23	0.059	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Di-n-butyl phthalate	<0.23		0.23	0.069	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Di-n-octyl phthalate	<0.23		0.23	0.074	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Fluoranthene	<0.045		0.045	0.0084	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Fluorene	<0.045		0.045	0.0063	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Hexachlorobenzene	<0.091		0.091	0.010	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Hexachlorobutadiene	<0.23		0.23	0.071	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Hexachlorocyclopentadiene	<0.91		0.91	0.26	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Hexachloroethane	<0.23		0.23	0.069	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1

Client Sample ID: 2686V2-10-B09-1
Date Collected: 05/16/19 08:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-22
Matrix: Solid
Percent Solids: 72.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.045		0.045	0.012	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Isophorone	<0.23		0.23	0.051	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Naphthalene	<0.045		0.045	0.0069	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Nitrobenzene	<0.045		0.045	0.011	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
N-Nitrosodi-n-propylamine	<0.091		0.091	0.055	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
N-Nitrosodiphenylamine	<0.23		0.23	0.053	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Pentachlorophenol	<0.91		0.91	0.72	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Phenanthrene	<0.045		0.045	0.0063	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Phenol	<0.23		0.23	0.10	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1
Pyrene	**0.0094**	**J**	0.045	0.0090	mg/Kg	☼	05/30/19 07:47	05/31/19 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*64*		*31 - 143*	*05/30/19 07:47*	*05/31/19 14:38*	*1*
2-Fluorobiphenyl	*62*		*43 - 145*	*05/30/19 07:47*	*05/31/19 14:38*	*1*
2-Fluorophenol	*81*		*31 - 166*	*05/30/19 07:47*	*05/31/19 14:38*	*1*
Nitrobenzene-d5	*53*		*37 - 147*	*05/30/19 07:47*	*05/31/19 14:38*	*1*
Phenol-d5	*70*		*30 - 153*	*05/30/19 07:47*	*05/31/19 14:38*	*1*
Terphenyl-d14	*81*		*42 - 157*	*05/30/19 07:47*	*05/31/19 14:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.87**	**J F1**	1.3	0.26	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Arsenic	**4.5**		0.66	0.23	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Barium	**66**		0.66	0.075	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Beryllium	**1.1**		0.26	0.062	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Boron	**20**	**B**	3.3	0.31	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Cadmium	**0.35**	**F1 B**	0.13	0.024	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Calcium	**33000**	**F2 B**	13	2.2	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Chromium	**29**		0.66	0.33	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Cobalt	**13**		0.33	0.086	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Copper	**25**		0.66	0.18	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Iron	**23000**		13	6.9	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Lead	**13**		0.33	0.15	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Magnesium	**21000**		6.6	3.3	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Manganese	**250**		0.66	0.096	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Nickel	**42**		0.66	0.19	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Potassium	**5000**		33	12	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Selenium	<0.66	F1	0.66	0.39	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Silver	**3.6**		0.33	0.085	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Sodium	**140**		66	9.8	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Thallium	**1.4**		0.66	0.33	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Vanadium	**33**		0.33	0.078	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1
Zinc	**100**	**B**	1.3	0.58	mg/Kg	☼	05/28/19 08:57	05/28/19 20:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/28/19 09:51	05/29/19 02:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 09:51	05/29/19 02:39	1

Client Sample ID: 2686V2-10-B09-1

Date Collected: 05/16/19 08:00
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-22

Matrix: Solid
Percent Solids: 72.4

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/28/19 14:37	05/29/19 17:02	1
Barium	**0.076**	**J**	0.50	0.050	mg/L		05/28/19 14:37	05/29/19 17:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/28/19 14:37	05/29/19 17:02	1
Boron	<0.10		0.10	0.050	mg/L		05/28/19 14:37	05/29/19 17:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/28/19 14:37	05/29/19 17:02	1
Calcium	**13**		2.5	0.50	mg/L		05/28/19 14:37	05/29/19 17:02	1
Chromium	**0.017**	**J**	0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:02	1
Cobalt	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:02	1
Iron	**11**		0.40	0.20	mg/L		05/28/19 14:37	05/29/19 17:02	1
Lead	**0.013**		0.0075	0.0075	mg/L		05/28/19 14:37	05/29/19 17:02	1
Manganese	**0.053**		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:02	1
Nickel	**0.012**	**J**	0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:02	1
Potassium	**5.9**		2.5	0.50	mg/L		05/28/19 14:37	05/29/19 17:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/28/19 14:37	05/29/19 17:02	1
Silver	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:02	1
Zinc	**0.040**	**J B**	0.50	0.020	mg/L		05/28/19 14:37	05/29/19 17:02	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/28/19 14:37	05/30/19 13:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/28/19 14:37	05/30/19 13:10	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 07:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.022	0.0073	mg/Kg	☼	05/28/19 15:10	05/29/19 08:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.60		0.60	0.21	mg/Kg	☼	05/29/19 23:30	05/30/19 12:37	1
pH	**8.4**		0.2	0.2	SU			05/23/19 16:51	1

Client Sample ID: 2686V2-10-B09-2
Date Collected: 05/16/19 08:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-23
Matrix: Solid
Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Acetone	**0.025**		0.016	0.0071	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/17/19 18:04	05/28/19 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/17/19 18:04*	*05/28/19 13:58*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*05/17/19 18:04*	*05/28/19 13:58*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/17/19 18:04*	*05/28/19 13:58*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/17/19 18:04*	*05/28/19 13:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B09-2
Date Collected: 05/16/19 08:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-23
Matrix: Solid
Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1

Client Sample ID: 2686V2-10-B09-2
Date Collected: 05/16/19 08:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-23
Matrix: Solid
Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	05/30/19 07:47	05/31/19 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*61*		*31 - 143*	*05/30/19 07:47*	*05/31/19 15:08*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*05/30/19 07:47*	*05/31/19 15:08*	*1*
2-Fluorophenol	*97*		*31 - 166*	*05/30/19 07:47*	*05/31/19 15:08*	*1*
Nitrobenzene-d5	*65*		*37 - 147*	*05/30/19 07:47*	*05/31/19 15:08*	*1*
Phenol-d5	*86*		*30 - 153*	*05/30/19 07:47*	*05/31/19 15:08*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/30/19 07:47*	*05/31/19 15:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.78**	**J**	1.1	0.22	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Arsenic	**3.9**		0.57	0.19	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Barium	**75**		0.57	0.065	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Beryllium	**0.85**		0.23	0.053	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Boron	**20**	**B**	2.8	0.26	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Cadmium	**0.26**	**B**	0.11	0.020	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Calcium	**66000**	**B**	57	9.6	mg/Kg	☼	05/28/19 08:57	05/29/19 21:05	5
Chromium	**22**		0.57	0.28	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Cobalt	**11**		0.28	0.074	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Copper	**21**		0.57	0.16	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Iron	**18000**		11	5.9	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Magnesium	**26000**		5.7	2.8	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Manganese	**420**		0.57	0.082	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Nickel	**31**		0.57	0.17	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Potassium	**4400**		28	10	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Silver	**2.8**		0.28	0.073	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Sodium	**170**		57	8.4	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Thallium	**1.1**		0.57	0.28	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Vanadium	**27**		0.28	0.067	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1
Zinc	**65**	**B**	1.1	0.50	mg/Kg	☼	05/28/19 08:57	05/28/19 20:44	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/28/19 14:37	05/29/19 17:06	1
Barium	**0.062**	**J**	0.50	0.050	mg/L		05/28/19 14:37	05/29/19 17:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/28/19 14:37	05/29/19 17:06	1
Boron	**0.066**	**J B**	0.10	0.050	mg/L		05/28/19 14:37	05/29/19 17:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Client Sample ID: 2686V2-10-B09-2
Date Collected: 05/16/19 08:05
Date Received: 05/17/19 11:15

Lab Sample ID: 500-163561-23
Matrix: Solid
Percent Solids: 80.1

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/28/19 14:37	05/29/19 17:06	1
Calcium	**27**		2.5	0.50	mg/L		05/28/19 14:37	05/29/19 17:06	1
Chromium	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:06	1
Cobalt	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:06	1
Iron	<0.40		0.40	0.20	mg/L		05/28/19 14:37	05/29/19 17:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/28/19 14:37	05/29/19 17:06	1
Manganese	**0.032**		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:06	1
Nickel	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:06	1
Potassium	**1.1**	**J**	2.5	0.50	mg/L		05/28/19 14:37	05/29/19 17:06	1
Selenium	<0.050		0.050	0.020	mg/L		05/28/19 14:37	05/29/19 17:06	1
Silver	<0.025		0.025	0.010	mg/L		05/28/19 14:37	05/29/19 17:06	1
Zinc	<0.50		0.50	0.020	mg/L		05/28/19 14:37	05/29/19 17:06	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/28/19 14:37	05/30/19 13:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/28/19 14:37	05/30/19 13:23	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/29/19 10:05	05/30/19 07:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.020	0.0066	mg/Kg	☼	05/28/19 15:10	05/29/19 08:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.58		0.58	0.20	mg/Kg	☼	05/29/19 23:30	05/30/19 12:38	1
pH	**8.1**		0.2	0.2	SU			05/23/19 16:58	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-163561-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	06-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact

Andrews Engineering, Ir
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

500-163561 COC

Laboratory

Lab: **Test America - Chicago**
Address: **2417 Bond Street**
University Park, IL 60484
Phone: **708-534-5200**
Contact: **Dick Wright**
email: richard.wright@testamericainc.com

Project Name: ~~FAP 340, Cook County~~ ✓
Project No.: PTB 184-006 / ~~AE7~~ 018A
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other
Sampler: WILLIAM ULEWICZ

COC No.: 1 of 4
Lab Job No.: 500-163561
Sample Temp: 2.7 5.8 3.4 3.7 3.9

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	2686V2-10-B17-1	5-16	0630	S	X	X					X	X	X	X	X					
2	2686V2-10-B17-2		0635																	
3	2686V2-10-B17-1 DUP		0640																	
4	2686V2-10-B16-1		0645																	
5	2686V2-10-B16-2		0650																	
6	2686V2-10-B11		0655																	
7	2686V2-10-B14		0657																	
8	2686V2-10-B15		0700																	
9	2686V2-10-B13-1		0705																	
10	2686V2-10-B13-2		0710																	
11	2686V2-10-B10-1		0715																	
12	TRIP BLANK #4				X															

Relinquished by:	Date/Time 5/16/19 1435	Received by:	Date/Time 5/16/19 14:35
Relinquished by:	Date/Time 5/17/19 9:50	Received by:	Date/Time 5/17/19 0930
Relinquished by: P. Neal	Date/Time 5/17/19 1115	Received by:	Date/Time 5/17/19 1115

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com

Project Name: ~~[redacted]~~

Project No.: PTB 184-006/~~[redacted]~~018A

TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: WILLIAM ULEWICZ

COC No.: 2 of 4

Lab Job No.: 500-163561

Sample Temp: 5.8, 3.4, 3.7, 3.9, 2.7

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
13	2686V2-10-1310-2	5-16	0720	S	X	X					X	X	X	X	X					
14	2686V2-10-1310-2DUP		0725																	
15	2686V2-10-1307-1		0730																	
16	2686V2-10-1307-2		0735																	
17	2686V2-10-1307-2 DUP		0740																	
18	2686V2-10-1308-1		0745																	
19	2686V2-10-1308-2		0747																	
20	2686V2-10-1312-1		0750																	
21	2686V2-10-1312-2		0755																	
22	2686V2-10-1309-1		0800																	
23	2686V2-10-1309-2	↓	0805	↓	↓	↓					↓	↓	↓	↓	↓					

Relinquished by:	Date/Time 5/16/19 1435	Received by:	Date/Time 5/16/19 1435
Relinquished by:	Date/Time 5/17/19 9:50	Received by:	Date/Time 5/17/19 0950
Relinquished by:	Date/Time 5/17/19 1115	Received by:	Date/Time 5/17/19 1115

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-162990-1
Client Project/Site: IDOT - AE7-18A

For:
Andrews Engineering Inc.
3300 Ginger Creek Drive
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

Authorized for release by:
5/22/2019 3:40:32 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Client Sample ID: 2686V2-10-B36
Date Collected: 05/07/19 09:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-1
Matrix: Solid
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Acetone	**0.021**		0.015	0.0064	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Carbon disulfide	<0.0037		0.0037	0.00076	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Methylene Chloride	**0.0017**	**J**	0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/08/19 17:33	05/13/19 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/13/19 20:04*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/08/19 17:33*	*05/13/19 20:04*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/08/19 17:33*	*05/13/19 20:04*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*05/08/19 17:33*	*05/13/19 20:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B36
Date Collected: 05/07/19 09:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-1
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Acenaphthene	**0.0074**	**J**	0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Chrysene	**0.027**	**J**	0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1

Client Sample ID: 2686V2-10-B36
Date Collected: 05/07/19 09:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-1
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Phenanthrene	**0.011**	**J**	0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1
Pyrene	**0.014**	**J**	0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*121*		*31 - 143*	*05/14/19 15:15*	*05/15/19 13:12*	*1*
2-Fluorobiphenyl	*77*		*43 - 145*	*05/14/19 15:15*	*05/15/19 13:12*	*1*
2-Fluorophenol	*83*		*31 - 166*	*05/14/19 15:15*	*05/15/19 13:12*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/14/19 15:15*	*05/15/19 13:12*	*1*
Phenol-d5	*74*		*30 - 153*	*05/14/19 15:15*	*05/15/19 13:12*	*1*
Terphenyl-d14	*106*		*42 - 157*	*05/14/19 15:15*	*05/15/19 13:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J F1**	1.1	0.22	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Arsenic	**6.0**	**F1**	0.56	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Barium	**38**		0.56	0.063	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Beryllium	**0.59**		0.22	0.052	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Boron	**14**	**B**	2.8	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Cadmium	**0.25**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Calcium	**70000**	**B**	56	9.4	mg/Kg	☼	05/14/19 16:16	05/16/19 15:22	5
Chromium	**17**		0.56	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Cobalt	**8.7**		0.28	0.073	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Copper	**21**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Iron	**17000**		11	5.8	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Lead	**12**		0.28	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Magnesium	**29000**		5.6	2.8	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Manganese	**350**		0.56	0.081	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Nickel	**27**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Potassium	**3100**		28	9.8	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Selenium	<0.56	F1	0.56	0.33	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Silver	**2.3**		0.28	0.072	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Sodium	**170**		56	8.2	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Thallium	**0.63**		0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Vanadium	**20**		0.28	0.066	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1
Zinc	**53**		1.1	0.49	mg/Kg	☼	05/14/19 16:16	05/15/19 14:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 13:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 13:36	1
Manganese	**0.80**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 13:36	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B36

Date Collected: 05/07/19 09:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-1

Matrix: Solid
Percent Solids: 85.9

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.014**	**J**	0.050	0.010	mg/L		05/17/19 14:52	05/20/19 14:44	1
Barium	**0.19**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 14:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 14:44	1
Boron	**0.16**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 14:44	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 14:44	1
Calcium	**30**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:44	1
Chromium	**0.073**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:44	1
Cobalt	**0.016**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:44	1
Iron	**54**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 14:44	1
Lead	**0.029**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 14:44	1
Manganese	**0.25**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:44	1
Nickel	**0.060**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:44	1
Potassium	**21**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:44	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 14:44	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:44	1
Zinc	**0.27**	**J**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 14:44	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:28	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0056	mg/Kg	☼	05/16/19 14:10	05/17/19 08:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	05/20/19 17:00	05/21/19 11:59	1
pH	**8.5**		0.2	0.2	SU			05/14/19 15:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B34-1
Date Collected: 05/07/19 09:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-2
Matrix: Solid
Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Acetone	**0.028**		0.017	0.0073	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Bromomethane	<0.0042	*	0.0042	0.0016	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Chloromethane	<0.0042	*	0.0042	0.0017	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Methylene Chloride	**0.0022**	**J**	0.0042	0.0017	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/08/19 17:33	05/14/19 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/08/19 17:33*	*05/14/19 22:34*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/08/19 17:33*	*05/14/19 22:34*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/08/19 17:33*	*05/14/19 22:34*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/08/19 17:33*	*05/14/19 22:34*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1

Client Sample ID: 2686V2-10-B34-1

Date Collected: 05/07/19 09:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-2

Matrix: Solid
Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Acenaphthene	**0.016**	**J**	0.038	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Benzo[b]fluoranthene	**0.0099**	**J**	0.038	0.0082	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.038	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Chrysene	**0.017**	**J**	0.038	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B34-1
Date Collected: 05/07/19 09:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-2
Matrix: Solid
Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1
Pyrene	**0.019**	**J**	0.038	0.0076	mg/Kg	☼	05/14/19 15:15	05/15/19 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*108*		*31 - 143*	*05/14/19 15:15*	*05/15/19 13:36*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*05/14/19 15:15*	*05/15/19 13:36*	*1*
2-Fluorophenol	*83*		*31 - 166*	*05/14/19 15:15*	*05/15/19 13:36*	*1*
Nitrobenzene-d5	*59*		*37 - 147*	*05/14/19 15:15*	*05/15/19 13:36*	*1*
Phenol-d5	*87*		*30 - 153*	*05/14/19 15:15*	*05/15/19 13:36*	*1*
Terphenyl-d14	*102*		*42 - 157*	*05/14/19 15:15*	*05/15/19 13:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.29**	**J**	1.2	0.23	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Arsenic	**5.6**		0.59	0.20	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Barium	**42**		0.59	0.067	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Beryllium	**0.67**		0.24	0.055	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Boron	**15**	**B**	3.0	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Cadmium	**0.36**	**B**	0.12	0.021	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Calcium	**55000**	**B**	59	10	mg/Kg	☼	05/14/19 16:16	05/16/19 15:42	5
Chromium	**19**		0.59	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Cobalt	**12**		0.30	0.077	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Copper	**23**		0.59	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Iron	**18000**		12	6.1	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Lead	**13**		0.30	0.14	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Magnesium	**25000**		5.9	2.9	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Manganese	**310**		0.59	0.086	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Nickel	**31**		0.59	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Potassium	**3300**		30	10	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Silver	**2.8**		0.30	0.076	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Sodium	**130**		59	8.7	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Thallium	**0.93**		0.59	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Vanadium	**25**		0.30	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1
Zinc	**59**		1.2	0.52	mg/Kg	☼	05/14/19 16:16	05/15/19 15:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 13:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 13:41	1
Manganese	**1.1**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 13:41	1

Client Sample ID: 2686V2-10-B34-1

Date Collected: 05/07/19 09:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-2

Matrix: Solid
Percent Solids: 83.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.011**	**J**	0.050	0.010	mg/L		05/17/19 14:52	05/20/19 14:48	1
Barium	**0.13**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 14:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 14:48	1
Boron	**0.098**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 14:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 14:48	1
Calcium	**15**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:48	1
Chromium	**0.046**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:48	1
Cobalt	**0.017**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:48	1
Iron	**42**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 14:48	1
Lead	**0.031**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 14:48	1
Manganese	**0.16**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:48	1
Nickel	**0.040**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:48	1
Potassium	**12**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:48	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 14:48	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:48	1
Zinc	**0.086**	**J**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 14:48	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:32	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.019	0.0063	mg/Kg	☼	05/16/19 14:10	05/17/19 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	05/20/19 17:00	05/21/19 11:59	1
pH	**8.6**		0.2	0.2	SU			05/14/19 15:56	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B34-2
Date Collected: 05/07/19 09:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-3
Matrix: Solid
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00062	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Acetone	**0.014**	**J**	0.015	0.0063	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Bromoform	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Bromomethane	<0.0036	*	0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Chloroform	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Chloromethane	<0.0036	*	0.0036	0.0015	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/08/19 17:33	05/14/19 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/08/19 17:33*	*05/14/19 23:00*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/08/19 17:33*	*05/14/19 23:00*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/08/19 17:33*	*05/14/19 23:00*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/14/19 23:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1

Client Sample ID: 2686V2-10-B34-2
Date Collected: 05/07/19 09:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-3
Matrix: Solid
Percent Solids: 86.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Acenaphthene	**0.0090**	**J**	0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Benzo[g,h,i]perylene	**0.015**	**J**	0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Chrysene	**0.024**	**J**	0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1

Client Sample ID: 2686V2-10-B34-2
Date Collected: 05/07/19 09:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-3
Matrix: Solid
Percent Solids: 86.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Phenanthrene	**0.044**		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1
Pyrene	**0.010**	**J**	0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*31 - 143*	*05/14/19 15:15*	*05/15/19 18:54*	*1*
2-Fluorobiphenyl	*77*		*43 - 145*	*05/14/19 15:15*	*05/15/19 18:54*	*1*
2-Fluorophenol	*74*		*31 - 166*	*05/14/19 15:15*	*05/15/19 18:54*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/14/19 15:15*	*05/15/19 18:54*	*1*
Phenol-d5	*74*		*30 - 153*	*05/14/19 15:15*	*05/15/19 18:54*	*1*
Terphenyl-d14	*102*		*42 - 157*	*05/14/19 15:15*	*05/15/19 18:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Arsenic	**6.1**		0.53	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Barium	**49**		0.53	0.060	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Beryllium	**0.63**		0.21	0.049	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Boron	**17**	**B**	2.6	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Cadmium	**0.24**	**B**	0.11	0.019	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Calcium	**72000**	**B**	53	9.0	mg/Kg	☼	05/14/19 16:16	05/16/19 15:46	5
Chromium	**18**		0.53	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Cobalt	**12**		0.26	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Copper	**21**		0.53	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Iron	**16000**		11	5.5	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Lead	**11**		0.26	0.12	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Magnesium	**29000**		5.3	2.6	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Manganese	**400**		0.53	0.077	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Nickel	**30**		0.53	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Potassium	**3600**		26	9.4	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Silver	**2.1**		0.26	0.068	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Sodium	**210**		53	7.8	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Thallium	**0.71**		0.53	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Vanadium	**21**		0.26	0.062	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1
Zinc	**46**		1.1	0.46	mg/Kg	☼	05/14/19 16:16	05/15/19 15:21	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 14:52	1
Barium	**0.050**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 14:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 14:52	1
Boron	**0.070**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 14:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B34-2
Date Collected: 05/07/19 09:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-3
Matrix: Solid
Percent Solids: 86.1

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 14:52	1
Calcium	**16**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:52	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:52	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:52	1
Iron	**1.8**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 14:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 14:52	1
Manganese	**0.027**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:52	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:52	1
Potassium	**2.8**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:52	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 14:52	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:52	1
Zinc	**0.12**	**J**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 14:52	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:36	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0062	mg/Kg	☼	05/16/19 14:10	05/17/19 08:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	05/20/19 17:00	05/21/19 12:00	1
pH	**8.3**		0.2	0.2	SU			05/14/19 16:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B33-1
Date Collected: 05/07/19 09:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-4
Matrix: Solid
Percent Solids: 87.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Acetone	**0.0082**	**J**	0.015	0.0064	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Bromomethane	<0.0037	*	0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Carbon disulfide	<0.0037		0.0037	0.00076	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Chloromethane	<0.0037	*	0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Methylene Chloride	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/08/19 17:33	05/14/19 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/08/19 17:33*	*05/14/19 23:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*75 - 131*	*05/08/19 17:33*	*05/14/19 23:26*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/08/19 17:33*	*05/14/19 23:26*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/08/19 17:33*	*05/14/19 23:26*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1

Client Sample ID: 2686V2-10-B33-1
Date Collected: 05/07/19 09:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-4
Matrix: Solid
Percent Solids: 87.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,4-Dinitrophenol	<0.74	F1	0.74	0.64	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2-Methylnaphthalene	<0.074	F1	0.074	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Acenaphthene	**0.019**	**J**	0.036	0.0066	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Benzo[b]fluoranthene	<0.036	F1	0.036	0.0079	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.036	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Di-n-octyl phthalate	<0.18	F1	0.18	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Hexachlorobenzene	<0.074		0.074	0.0084	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Hexachlorocyclopentadiene	<0.74	F1	0.74	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1

Client Sample ID: 2686V2-10-B33-1
Date Collected: 05/07/19 09:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-4
Matrix: Solid
Percent Solids: 87.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Pentachlorophenol	<0.74	F1	0.74	0.58	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*128*		*31 - 143*	*05/14/19 15:15*	*05/15/19 14:22*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*05/14/19 15:15*	*05/15/19 14:22*	*1*
2-Fluorophenol	*82*		*31 - 166*	*05/14/19 15:15*	*05/15/19 14:22*	*1*
Nitrobenzene-d5	*55*		*37 - 147*	*05/14/19 15:15*	*05/15/19 14:22*	*1*
Phenol-d5	*76*		*30 - 153*	*05/14/19 15:15*	*05/15/19 14:22*	*1*
Terphenyl-d14	*109*		*42 - 157*	*05/14/19 15:15*	*05/15/19 14:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Arsenic	**6.7**		0.54	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Barium	**28**		0.54	0.061	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Beryllium	**0.52**		0.22	0.050	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Boron	**14**	**B**	2.7	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Cadmium	**0.28**	**B**	0.11	0.019	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Calcium	**82000**	**B**	54	9.1	mg/Kg	☼	05/14/19 16:16	05/16/19 15:50	5
Chromium	**13**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Cobalt	**11**		0.27	0.071	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Copper	**22**		0.54	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Iron	**16000**		11	5.6	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Lead	**12**		0.27	0.12	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Magnesium	**45000**		27	13	mg/Kg	☼	05/14/19 16:16	05/16/19 15:50	5
Manganese	**590**		0.54	0.078	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Nickel	**26**		0.54	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Potassium	**2600**		27	9.5	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Silver	**1.8**		0.27	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Sodium	**140**		54	8.0	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Vanadium	**18**		0.27	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1
Zinc	**53**		1.1	0.47	mg/Kg	☼	05/14/19 16:16	05/15/19 15:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 13:49	1
Iron	<0.20		0.20	0.20	mg/L		05/17/19 14:53	05/20/19 13:49	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B33-1

Date Collected: 05/07/19 09:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-4

Matrix: Solid
Percent Solids: 87.3

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 14:56	1
Barium	<0.50		0.50	0.050	mg/L		05/17/19 14:52	05/20/19 14:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 14:56	1
Boron	**0.057**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 14:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 14:56	1
Calcium	**8.6**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:56	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:56	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:56	1
Iron	**5.6**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 14:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 14:56	1
Manganese	**0.025**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:56	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:56	1
Potassium	**3.3**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 14:56	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 14:56	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 14:56	1
Zinc	<0.50		0.50	0.020	mg/L		05/17/19 14:52	05/20/19 14:56	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:40	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0060	mg/Kg	☼	05/16/19 14:10	05/17/19 08:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.40		0.40	0.14	mg/Kg	☼	05/20/19 17:00	05/21/19 12:00	1
pH	**8.5**		0.2	0.2	SU			05/14/19 16:03	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B33-2
Date Collected: 05/07/19 09:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-5
Matrix: Solid
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Acetone	**0.0084**	**J**	0.016	0.0068	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/15/19 12:46*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/08/19 17:33*	*05/15/19 12:46*	*1*
Dibromofluoromethane	*92*		*75 - 126*	*05/08/19 17:33*	*05/15/19 12:46*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/08/19 17:33*	*05/15/19 12:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1

Client Sample ID: 2686V2-10-B33-2
Date Collected: 05/07/19 09:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-5
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Acenaphthene	**0.014**	**J**	0.038	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Benzo[a]pyrene	**0.0075**	**J**	0.038	0.0075	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Benzo[b]fluoranthene	**0.013**	**J**	0.038	0.0083	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.038	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Chrysene	**0.022**	**J**	0.038	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1

Client Sample ID: 2686V2-10-B33-2
Date Collected: 05/07/19 09:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-5
Matrix: Solid
Percent Solids: 85.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Phenanthrene	**0.0081**	**J**	0.038	0.0054	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1
Pyrene	**0.020**	**J**	0.038	0.0077	mg/Kg	☼	05/14/19 15:15	05/15/19 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*31 - 143*	*05/14/19 15:15*	*05/15/19 15:07*	*1*
2-Fluorobiphenyl	*79*		*43 - 145*	*05/14/19 15:15*	*05/15/19 15:07*	*1*
2-Fluorophenol	*82*		*31 - 166*	*05/14/19 15:15*	*05/15/19 15:07*	*1*
Nitrobenzene-d5	*55*		*37 - 147*	*05/14/19 15:15*	*05/15/19 15:07*	*1*
Phenol-d5	*75*		*30 - 153*	*05/14/19 15:15*	*05/15/19 15:07*	*1*
Terphenyl-d14	*118*		*42 - 157*	*05/14/19 15:15*	*05/15/19 15:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Arsenic	**5.8**		0.56	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Barium	**39**		0.56	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Beryllium	**0.49**		0.23	0.053	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Boron	**14**	**B**	2.8	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Cadmium	**0.31**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Calcium	**67000**	**B**	56	9.6	mg/Kg	☼	05/14/19 16:16	05/16/19 15:54	5
Chromium	**14**		0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Cobalt	**16**		0.28	0.074	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Copper	**23**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Iron	**16000**		11	5.9	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Magnesium	**29000**		5.6	2.8	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Manganese	**560**		0.56	0.082	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Nickel	**29**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Potassium	**2600**		28	10	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Silver	**1.9**		0.28	0.073	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Sodium	**140**		56	8.4	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Thallium	**0.54**	**J**	0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Vanadium	**18**		0.28	0.067	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1
Zinc	**54**		1.1	0.50	mg/Kg	☼	05/14/19 16:16	05/15/19 15:29	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:00	1
Barium	<0.50		0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:00	1
Boron	**0.057**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B33-2
Date Collected: 05/07/19 09:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-5
Matrix: Solid
Percent Solids: 85.9

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:00	1
Calcium	**8.4**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:00	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:00	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:00	1
Iron	**1.8**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:00	1
Manganese	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:00	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:00	1
Potassium	**1.5**	**J**	2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:00	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:00	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:00	1
Zinc	**0.036**	**J**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:00	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:44	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.017	0.0058	mg/Kg	☼	05/16/19 14:10	05/17/19 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.47		0.47	0.16	mg/Kg	☼	05/20/19 17:00	05/21/19 12:00	1
pH	**8.3**		0.2	0.2	SU			05/14/19 16:06	1

Client Sample ID: 2686V2-10-B33-2 Dup

Date Collected: 05/07/19 10:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-6

Matrix: Solid
Percent Solids: 86.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Acetone	**0.012**	**J**	0.015	0.0065	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Methylene Chloride	**0.0015**	**J**	0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/08/19 17:33	05/15/19 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*05/08/19 17:33*	*05/15/19 13:12*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/15/19 13:12*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/15/19 13:12*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/08/19 17:33*	*05/15/19 13:12*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1

Client Sample ID: 2686V2-10-B33-2 Dup

Date Collected: 05/07/19 10:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-6

Matrix: Solid
Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Acenaphthene	**0.0096**	**J**	0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Benzo[b]fluoranthene	**0.0091**	**J**	0.037	0.0080	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Chrysene	**0.023**	**J**	0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B33-2 Dup

Date Collected: 05/07/19 10:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-6

Matrix: Solid
Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Phenanthrene	**0.0068**	**J**	0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1
Pyrene	**0.017**	**J**	0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*96*		*31 - 143*	*05/14/19 15:15*	*05/15/19 15:30*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/14/19 15:15*	*05/15/19 15:30*	*1*
2-Fluorophenol	*85*		*31 - 166*	*05/14/19 15:15*	*05/15/19 15:30*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/14/19 15:15*	*05/15/19 15:30*	*1*
Phenol-d5	*74*		*30 - 153*	*05/14/19 15:15*	*05/15/19 15:30*	*1*
Terphenyl-d14	*105*		*42 - 157*	*05/14/19 15:15*	*05/15/19 15:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.21**	**J**	1.1	0.20	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Arsenic	**7.0**		0.53	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Barium	**42**		0.53	0.060	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Beryllium	**0.38**		0.21	0.049	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Boron	**11**	**B**	2.6	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Cadmium	**0.28**	**B**	0.11	0.019	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Calcium	**70000**	**B**	53	8.9	mg/Kg	☼	05/14/19 16:16	05/16/19 15:58	5
Chromium	**11**		0.53	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Cobalt	**12**		0.26	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Copper	**22**		0.53	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Iron	**14000**		11	5.5	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Lead	**11**		0.26	0.12	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Magnesium	**30000**		5.3	2.6	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Manganese	**550**		0.53	0.076	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Nickel	**24**		0.53	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Potassium	**1900**		26	9.3	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Silver	**1.7**		0.26	0.068	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Sodium	**130**		53	7.8	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Thallium	**0.56**		0.53	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Vanadium	**14**		0.26	0.062	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1
Zinc	**57**		1.1	0.46	mg/Kg	☼	05/14/19 16:16	05/15/19 15:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:04	1
Barium	<0.50		0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:04	1
Boron	**0.058**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B33-2 Dup
Date Collected: 05/07/19 10:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-6
Matrix: Solid
Percent Solids: 86.5

Method: 6010B - Metals (ICP) - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:04	1
Calcium	**8.7**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:04	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:04	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:04	1
Iron	**0.71**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:04	1
Manganese	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:04	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:04	1
Potassium	**0.95**	**J**	2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:04	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:04	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:04	1
Zinc	<0.50		0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:48	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0061	mg/Kg	☼	05/16/19 14:10	05/17/19 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 12:01	1
pH	**8.3**		0.2	0.2	SU			05/14/19 16:10	1

Client Sample ID: 2686V2-10-B30-1

Date Collected: 05/07/19 10:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-7

Matrix: Solid
Percent Solids: 85.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Methylene Chloride	**0.0020**	**J**	0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/08/19 17:33	05/15/19 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/08/19 17:33*	*05/15/19 13:38*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/08/19 17:33*	*05/15/19 13:38*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/08/19 17:33*	*05/15/19 13:38*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/08/19 17:33*	*05/15/19 13:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1

Client Sample ID: 2686V2-10-B30-1
Date Collected: 05/07/19 10:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-7
Matrix: Solid
Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1

Client Sample ID: 2686V2-10-B30-1

Date Collected: 05/07/19 10:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-7

Matrix: Solid
Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*100*		*31 - 143*	*05/14/19 15:15*	*05/15/19 15:53*	*1*
2-Fluorobiphenyl	*70*		*43 - 145*	*05/14/19 15:15*	*05/15/19 15:53*	*1*
2-Fluorophenol	*69*		*31 - 166*	*05/14/19 15:15*	*05/15/19 15:53*	*1*
Nitrobenzene-d5	*63*		*37 - 147*	*05/14/19 15:15*	*05/15/19 15:53*	*1*
Phenol-d5	*75*		*30 - 153*	*05/14/19 15:15*	*05/15/19 15:53*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/14/19 15:15*	*05/15/19 15:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Arsenic	**6.7**		0.56	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Barium	**46**		0.56	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Beryllium	**0.70**		0.23	0.053	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Boron	**18**	**B**	2.8	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Cadmium	**0.26**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Calcium	**80000**	**B**	56	9.5	mg/Kg	☼	05/14/19 16:16	05/16/19 16:10	5
Chromium	**19**		0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Cobalt	**11**		0.28	0.074	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Copper	**22**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Iron	**18000**		11	5.9	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Lead	**11**		0.28	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Magnesium	**28000**		5.6	2.8	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Manganese	**350**		0.56	0.082	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Nickel	**30**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Potassium	**3800**		28	10	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Silver	**2.6**		0.28	0.073	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Sodium	**160**		56	8.3	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Thallium	**0.78**		0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Vanadium	**25**		0.28	0.066	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1
Zinc	**52**		1.1	0.49	mg/Kg	☼	05/14/19 16:16	05/15/19 15:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:53	05/20/19 14:02	1
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:02	1
Manganese	**0.43**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:02	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B30-1
Date Collected: 05/07/19 10:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-7
Matrix: Solid
Percent Solids: 85.1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.015**	**J**	0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:08	1
Barium	**0.24**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:08	1
Beryllium	**0.0041**		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:08	1
Boron	**0.21**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:08	1
Calcium	**44**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:08	1
Chromium	**0.088**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:08	1
Cobalt	**0.022**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:08	1
Iron	**67**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:08	1
Lead	**0.033**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:08	1
Manganese	**0.33**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:08	1
Nickel	**0.078**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:08	1
Potassium	**24**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:08	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:08	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:08	1
Zinc	**0.24**	**J**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:08	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:52	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0064	mg/Kg	☼	05/16/19 14:10	05/17/19 08:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 12:01	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:13	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B30-2
Date Collected: 05/07/19 10:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-8
Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,1-Dichloroethane	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Acetone	**0.014**		0.014	0.0063	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Toluene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/15/19 14:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 131*	*05/08/19 17:33*	*05/15/19 14:04*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/08/19 17:33*	*05/15/19 14:04*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/08/19 17:33*	*05/15/19 14:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1

Client Sample ID: 2686V2-10-B30-2
Date Collected: 05/07/19 10:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-8
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Acenaphthene	**0.011**	**J**	0.037	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Benzo[b]fluoranthene	**0.010**	**J**	0.037	0.0081	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Chrysene	**0.032**	**J**	0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1

Client Sample ID: 2686V2-10-B30-2
Date Collected: 05/07/19 10:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-8
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Phenanthrene	**0.031**	**J**	0.037	0.0053	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1
Pyrene	**0.018**	**J**	0.037	0.0075	mg/Kg	☼	05/14/19 15:15	05/15/19 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*31 - 143*	*05/14/19 15:15*	*05/15/19 18:32*	*1*
2-Fluorobiphenyl	*85*		*43 - 145*	*05/14/19 15:15*	*05/15/19 18:32*	*1*
2-Fluorophenol	*76*		*31 - 166*	*05/14/19 15:15*	*05/15/19 18:32*	*1*
Nitrobenzene-d5	*65*		*37 - 147*	*05/14/19 15:15*	*05/15/19 18:32*	*1*
Phenol-d5	*78*		*30 - 153*	*05/14/19 15:15*	*05/15/19 18:32*	*1*
Terphenyl-d14	*105*		*42 - 157*	*05/14/19 15:15*	*05/15/19 18:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	**J**	1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Arsenic	**6.9**		0.55	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Barium	**43**		0.55	0.062	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Beryllium	**0.64**		0.22	0.051	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Boron	**17**	**B**	2.7	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Cadmium	**0.26**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Calcium	**79000**	**B**	55	9.3	mg/Kg	☼	05/14/19 16:16	05/16/19 16:14	5
Chromium	**16**		0.55	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Cobalt	**16**		0.27	0.072	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Copper	**21**		0.55	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Iron	**18000**		11	5.7	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Magnesium	**32000**		5.5	2.7	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Manganese	**560**		0.55	0.079	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Nickel	**29**		0.55	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Potassium	**3400**		27	9.7	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Silver	**2.1**		0.27	0.071	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Sodium	**180**		55	8.1	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Thallium	**0.49**	**J**	0.55	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Vanadium	**21**		0.27	0.065	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1
Zinc	**51**		1.1	0.48	mg/Kg	☼	05/14/19 16:16	05/15/19 15:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:06	1

Client Sample ID: 2686V2-10-B30-2
Date Collected: 05/07/19 10:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-8
Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:12	1
Barium	**0.095**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:12	1
Boron	**0.084**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:12	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:12	1
Calcium	**15**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:12	1
Chromium	**0.028**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:12	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:12	1
Iron	**20**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:12	1
Lead	**0.012**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:12	1
Manganese	**0.10**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:12	1
Nickel	**0.022**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:12	1
Potassium	**9.7**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:12	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:12	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:12	1
Zinc	**0.082**	**J**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:12	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 22:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 22:56	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0062	mg/Kg	☼	05/16/19 14:10	05/17/19 08:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	05/20/19 17:00	05/21/19 12:01	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:16	1

Client Sample ID: 2686V2-10-B31-1
Date Collected: 05/07/19 10:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-9
Matrix: Solid
Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Acetone	**0.0078**	**J**	0.014	0.0063	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Methylene Chloride	**0.0022**	**J**	0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/08/19 17:33*	*05/15/19 14:30*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/08/19 17:33*	*05/15/19 14:30*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*05/08/19 17:33*	*05/15/19 14:30*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*05/08/19 17:33*	*05/15/19 14:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1

Client Sample ID: 2686V2-10-B31-1
Date Collected: 05/07/19 10:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-9
Matrix: Solid
Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Acenaphthene	**0.016**	**J**	0.037	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B31-1
Date Collected: 05/07/19 10:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-9
Matrix: Solid
Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	05/14/19 15:15	05/15/19 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*31 - 143*	*05/14/19 15:15*	*05/15/19 16:38*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*05/14/19 15:15*	*05/15/19 16:38*	*1*
2-Fluorophenol	*79*		*31 - 166*	*05/14/19 15:15*	*05/15/19 16:38*	*1*
Nitrobenzene-d5	*61*		*37 - 147*	*05/14/19 15:15*	*05/15/19 16:38*	*1*
Phenol-d5	*78*		*30 - 153*	*05/14/19 15:15*	*05/15/19 16:38*	*1*
Terphenyl-d14	*104*		*42 - 157*	*05/14/19 15:15*	*05/15/19 16:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Arsenic	**7.3**		0.59	0.20	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Barium	**32**		0.59	0.067	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Beryllium	**0.50**		0.24	0.055	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Boron	**13**	**B**	2.9	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Cadmium	**0.30**	**B**	0.12	0.021	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Calcium	**66000**	**B**	59	10	mg/Kg	☼	05/14/19 16:16	05/16/19 16:18	5
Chromium	**13**		0.59	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Cobalt	**12**		0.29	0.077	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Copper	**24**		0.59	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Iron	**16000**		12	6.1	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Lead	**12**		0.29	0.14	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Magnesium	**30000**		5.9	2.9	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Manganese	**480**		0.59	0.085	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Nickel	**32**		0.59	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Potassium	**2500**		29	10	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Silver	**2.0**		0.29	0.076	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Sodium	**120**		59	8.7	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Thallium	**0.71**		0.59	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Vanadium	**17**		0.29	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1
Zinc	**64**		1.2	0.52	mg/Kg	☼	05/14/19 16:16	05/15/19 15:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:10	1

Client Sample ID: 2686V2-10-B31-1

Date Collected: 05/07/19 10:25
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-9

Matrix: Solid
Percent Solids: 84.9

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:24	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:24	1
Boron	**0.10**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:24	1
Calcium	**15**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:24	1
Chromium	**0.040**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:24	1
Cobalt	**0.011**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:24	1
Iron	**31**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:24	1
Lead	**0.019**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:24	1
Manganese	**0.14**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:24	1
Nickel	**0.036**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:24	1
Potassium	**12**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:24	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:24	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:24	1
Zinc	**0.12**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:24	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:08	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.019	0.0062	mg/Kg	☼	05/16/19 14:10	05/17/19 09:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.43		0.43	0.15	mg/Kg	☼	05/20/19 17:00	05/21/19 12:02	1
pH	**8.8**		0.2	0.2	SU			05/14/19 16:20	1

Client Sample ID: 2686V2-10-B31-2
Date Collected: 05/07/19 10:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-10
Matrix: Solid
Percent Solids: 86.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Acetone	**0.017**		0.015	0.0065	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/08/19 17:33	05/15/19 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/08/19 17:33*	*05/15/19 14:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 131*	*05/08/19 17:33*	*05/15/19 14:56*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/08/19 17:33*	*05/15/19 14:56*	*1*
Toluene-d8 (Surr)	*100*		*75 - 124*	*05/08/19 17:33*	*05/15/19 14:56*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B31-2
Date Collected: 05/07/19 10:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-10
Matrix: Solid
Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2-Methylnaphthalene	**0.048**	**J**	0.075	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Chrysene	**0.028**	**J**	0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1

Client Sample ID: 2686V2-10-B31-2
Date Collected: 05/07/19 10:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-10
Matrix: Solid
Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Naphthalene	**0.0083**	**J**	0.037	0.0057	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
N-Nitrosodiphenylamine	**0.071**	**J**	0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Phenanthrene	**0.046**		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1
Pyrene	**0.014**	**J**	0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*117*		*31 - 143*	*05/14/19 15:15*	*05/15/19 18:09*	*1*
2-Fluorobiphenyl	*78*		*43 - 145*	*05/14/19 15:15*	*05/15/19 18:09*	*1*
2-Fluorophenol	*77*		*31 - 166*	*05/14/19 15:15*	*05/15/19 18:09*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/14/19 15:15*	*05/15/19 18:09*	*1*
Phenol-d5	*76*		*30 - 153*	*05/14/19 15:15*	*05/15/19 18:09*	*1*
Terphenyl-d14	*109*		*42 - 157*	*05/14/19 15:15*	*05/15/19 18:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Arsenic	**6.7**		0.57	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Barium	**41**		0.57	0.065	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Beryllium	**0.67**		0.23	0.053	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Boron	**18**	**B**	2.8	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Cadmium	**0.29**	**B**	0.11	0.021	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Calcium	**65000**	**B**	57	9.7	mg/Kg	☼	05/14/19 16:16	05/16/19 16:22	5
Chromium	**18**		0.57	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Cobalt	**13**		0.28	0.075	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Copper	**31**		0.57	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Iron	**18000**		11	5.9	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Lead	**16**		0.28	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Magnesium	**27000**		5.7	2.8	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Manganese	**390**		0.57	0.083	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Nickel	**37**		0.57	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Potassium	**3700**		28	10	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Silver	**2.1**		0.28	0.074	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Sodium	**190**		57	8.4	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Thallium	**0.90**		0.57	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Vanadium	**22**		0.28	0.067	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1
Zinc	**48**		1.1	0.50	mg/Kg	☼	05/14/19 16:16	05/15/19 15:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:23	1
Manganese	**1.8**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:23	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B31-2

Date Collected: 05/07/19 10:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-10

Matrix: Solid
Percent Solids: 86.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:28	1
Barium	**0.22**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:28	1
Boron	**0.14**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:28	1
Calcium	**30**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:28	1
Chromium	**0.067**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:28	1
Cobalt	**0.025**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:28	1
Iron	**40**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:28	1
Lead	**0.026**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:28	1
Manganese	**0.33**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:28	1
Nickel	**0.057**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:28	1
Potassium	**21**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:28	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:28	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:28	1
Zinc	**0.093**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:28	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:13	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0058	mg/Kg	☼	05/16/19 14:10	05/17/19 09:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 12:02	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:23	1

Client Sample ID: 2686V2-10-B28-1

Date Collected: 05/07/19 10:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-11

Matrix: Solid
Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Acetone	**0.013**	**J**	0.015	0.0067	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Methylene Chloride	**0.0021**	**J**	0.0038	0.0015	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	05/08/19 17:33	05/15/19 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/15/19 15:22*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/08/19 17:33*	*05/15/19 15:22*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/08/19 17:33*	*05/15/19 15:22*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/15/19 15:22*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B28-1
Date Collected: 05/07/19 10:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-11
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B28-1
Date Collected: 05/07/19 10:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-11
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*05/14/19 15:15*	*05/15/19 17:01*	*1*
2-Fluorobiphenyl	*71*		*43 - 145*	*05/14/19 15:15*	*05/15/19 17:01*	*1*
2-Fluorophenol	*72*		*31 - 166*	*05/14/19 15:15*	*05/15/19 17:01*	*1*
Nitrobenzene-d5	*74*		*37 - 147*	*05/14/19 15:15*	*05/15/19 17:01*	*1*
Phenol-d5	*75*		*30 - 153*	*05/14/19 15:15*	*05/15/19 17:01*	*1*
Terphenyl-d14	*91*		*42 - 157*	*05/14/19 15:15*	*05/15/19 17:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.27**	**J**	1.2	0.23	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Arsenic	**6.7**		0.58	0.20	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Barium	**33**		0.58	0.066	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Beryllium	**0.51**		0.23	0.054	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Boron	**13**	**B**	2.9	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Cadmium	**0.25**	**B**	0.12	0.021	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Calcium	**72000**	**B**	58	9.9	mg/Kg	☼	05/14/19 16:16	05/16/19 16:26	5
Chromium	**14**		0.58	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Cobalt	**11**		0.29	0.076	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Copper	**21**		0.58	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Iron	**15000**		12	6.1	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Lead	**11**		0.29	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Magnesium	**31000**		5.8	2.9	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Manganese	**390**		0.58	0.085	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Nickel	**25**		0.58	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Potassium	**2500**		29	10	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Silver	**2.1**		0.29	0.075	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Sodium	**120**		58	8.6	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Thallium	**0.51**	**J**	0.58	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Vanadium	**19**		0.29	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1
Zinc	**43**		1.2	0.51	mg/Kg	☼	05/14/19 16:16	05/15/19 15:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:27	1
Manganese	**0.38**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:27	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B28-1
Date Collected: 05/07/19 10:40
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-11
Matrix: Solid
Percent Solids: 85.6

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.017**	**J**	0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:31	1
Barium	**0.21**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:31	1
Boron	**0.14**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:31	1
Calcium	**23**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:31	1
Chromium	**0.072**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:31	1
Cobalt	**0.018**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:31	1
Iron	**56**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:31	1
Lead	**0.031**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:31	1
Manganese	**0.22**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:31	1
Nickel	**0.060**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:31	1
Potassium	**20**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:31	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:31	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:31	1
Zinc	**0.21**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:31	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:17	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.019	0.0064	mg/Kg	☼	05/16/19 14:10	05/17/19 09:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.51		0.51	0.18	mg/Kg	☼	05/20/19 17:00	05/21/19 12:03	1
pH	**8.2**		0.2	0.2	SU			05/14/19 16:26	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B28-2
Date Collected: 05/07/19 10:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-13
Matrix: Solid
Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Styrene	**0.00095**	**J**	0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/17/19 15:46*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/17/19 15:46*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/08/19 17:33*	*05/17/19 15:46*	*1*
Toluene-d8 (Surr)	*98*		*75 - 124*	*05/08/19 17:33*	*05/17/19 15:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1

Client Sample ID: 2686V2-10-B28-2
Date Collected: 05/07/19 10:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-13
Matrix: Solid
Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Benzo[b]fluoranthene	**0.0091**	**J**	0.037	0.0081	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.037	0.012	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Chrysene	**0.030**	**J**	0.037	0.010	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Fluoranthene	**0.0070**	**J**	0.037	0.0069	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1

Client Sample ID: 2686V2-10-B28-2
Date Collected: 05/07/19 10:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-13
Matrix: Solid
Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Phenanthrene	**0.039**		0.037	0.0052	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1
Pyrene	**0.014**	**J**	0.037	0.0074	mg/Kg	☼	05/14/19 15:15	05/15/19 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*31 - 143*	*05/14/19 15:15*	*05/15/19 17:24*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/14/19 15:15*	*05/15/19 17:24*	*1*
2-Fluorophenol	*75*		*31 - 166*	*05/14/19 15:15*	*05/15/19 17:24*	*1*
Nitrobenzene-d5	*60*		*37 - 147*	*05/14/19 15:15*	*05/15/19 17:24*	*1*
Phenol-d5	*73*		*30 - 153*	*05/14/19 15:15*	*05/15/19 17:24*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/14/19 15:15*	*05/15/19 17:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Arsenic	**3.6**		0.54	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Barium	**45**		0.54	0.062	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Beryllium	**0.60**		0.22	0.050	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Boron	**16**	**B**	2.7	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Cadmium	**0.24**	**B**	0.11	0.019	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Calcium	**71000**	**B**	54	9.2	mg/Kg	☼	05/14/19 16:16	05/16/19 16:34	5
Chromium	**18**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Cobalt	**10**		0.27	0.071	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Copper	**22**		0.54	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Iron	**15000**		11	5.6	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Lead	**10**		0.27	0.12	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Magnesium	**29000**		5.4	2.7	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Manganese	**390**		0.54	0.078	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Nickel	**28**		0.54	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Potassium	**3400**		27	9.6	mg/Kg	☼	05/14/19 16:16	05/16/19 16:30	1
Selenium	**0.77**	**B**	0.54	0.32	mg/Kg	☼	05/14/19 16:16	05/16/19 16:30	1
Silver	**2.1**		0.27	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Sodium	**180**		54	8.0	mg/Kg	☼	05/14/19 16:16	05/16/19 16:30	1
Thallium	**0.68**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Vanadium	**21**		0.27	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 16:05	1
Zinc	**51**		1.1	0.47	mg/Kg	☼	05/14/19 16:16	05/16/19 16:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:31	1
Manganese	**1.9**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:31	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B28-2
Date Collected: 05/07/19 10:45
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-13
Matrix: Solid
Percent Solids: 85.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:35	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:35	1
Boron	**0.12**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:35	1
Calcium	**23**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:35	1
Chromium	**0.048**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:35	1
Cobalt	**0.015**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:35	1
Iron	**28**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:35	1
Lead	**0.021**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:35	1
Manganese	**0.23**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:35	1
Nickel	**0.040**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:35	1
Potassium	**15**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:35	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:35	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:35	1
Zinc	**0.089**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:35	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033	F1	0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.019	0.0062	mg/Kg	☼	05/16/19 14:10	05/17/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.49		0.49	0.17	mg/Kg	☼	05/20/19 17:00	05/21/19 12:03	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:33	1

Client Sample ID: 2686V2-10-B28-2 Dup

Date Collected: 05/07/19 10:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-14

Matrix: Solid
Percent Solids: 86.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Acetone	**0.0091**	**J**	0.015	0.0065	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/08/19 17:33	05/16/19 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/16/19 17:08*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/16/19 17:08*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/08/19 17:33*	*05/16/19 17:08*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/08/19 17:33*	*05/16/19 17:08*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1

Client Sample ID: 2686V2-10-B28-2 Dup
Date Collected: 05/07/19 10:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-14
Matrix: Solid
Percent Solids: 86.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,4-Dinitrophenol	<0.77	F1	0.77	0.68	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2-Methylnaphthalene	**0.014**	**J F1**	0.077	0.0071	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Benzo[a]pyrene	**0.026**	**J**	0.038	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Benzo[b]fluoranthene	<0.038	F1	0.038	0.0083	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Benzo[g,h,i]perylene	**0.023**	**J**	0.038	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Chrysene	**0.024**	**J**	0.038	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Hexachlorocyclopentadiene	<0.77	F1	0.77	0.22	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B28-2 Dup
Date Collected: 05/07/19 10:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-14
Matrix: Solid
Percent Solids: 86.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.025	J	0.038	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Phenanthrene	0.033	J	0.038	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1
Pyrene	0.012	J	0.038	0.0076	mg/Kg	☼	05/15/19 07:32	05/16/19 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*80*		*31 - 143*	*05/15/19 07:32*	*05/16/19 11:43*	*1*
2-Fluorobiphenyl	*86*		*43 - 145*	*05/15/19 07:32*	*05/16/19 11:43*	*1*
2-Fluorophenol	*114*		*31 - 166*	*05/15/19 07:32*	*05/16/19 11:43*	*1*
Nitrobenzene-d5	*91*		*37 - 147*	*05/15/19 07:32*	*05/16/19 11:43*	*1*
Phenol-d5	*107*		*30 - 153*	*05/15/19 07:32*	*05/16/19 11:43*	*1*
Terphenyl-d14	*97*		*42 - 157*	*05/15/19 07:32*	*05/16/19 11:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Arsenic	4.4		0.53	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Barium	30		0.53	0.061	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Beryllium	0.51		0.21	0.050	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Boron	15	B	2.7	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Cadmium	0.22	B	0.11	0.019	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Calcium	68000	B	53	9.0	mg/Kg	☼	05/14/19 16:16	05/16/19 16:42	5
Chromium	15		0.53	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Cobalt	10		0.27	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Copper	19		0.53	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Iron	14000		11	5.5	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Lead	10		0.27	0.12	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Magnesium	28000		5.3	2.6	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Manganese	350		0.53	0.077	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Nickel	26		0.53	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Potassium	3000		27	9.4	mg/Kg	☼	05/14/19 16:16	05/16/19 16:38	1
Selenium	0.36	J B	0.53	0.31	mg/Kg	☼	05/14/19 16:16	05/16/19 16:38	1
Silver	2.2		0.27	0.068	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Sodium	160		53	7.9	mg/Kg	☼	05/14/19 16:16	05/16/19 16:38	1
Thallium	0.89		0.53	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Vanadium	19		0.27	0.063	mg/Kg	☼	05/14/19 16:16	05/15/19 16:09	1
Zinc	47		1.1	0.47	mg/Kg	☼	05/14/19 16:16	05/16/19 16:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:35	1
Manganese	2.1		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:35	1

Client Sample ID: 2686V2-10-B28-2 Dup

Date Collected: 05/07/19 10:50
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-14

Matrix: Solid
Percent Solids: 86.3

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:39	1
Barium	**0.13**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:39	1
Boron	**0.10**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:39	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:39	1
Calcium	**22**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:39	1
Chromium	**0.039**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:39	1
Cobalt	**0.013**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:39	1
Iron	**23**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:39	1
Lead	**0.019**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:39	1
Manganese	**0.21**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:39	1
Nickel	**0.031**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:39	1
Potassium	**13**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:39	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:39	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:39	1
Zinc	**0.076**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:39	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:25	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.018	0.0061	mg/Kg	☼	05/16/19 14:10	05/17/19 09:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/20/19 17:00	05/21/19 12:03	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B27-1
Date Collected: 05/07/19 11:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-15
Matrix: Solid
Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*05/08/19 17:33*	*05/16/19 17:33*	*1*
4-Bromofluorobenzene (Surr)	*90*		*75 - 131*	*05/08/19 17:33*	*05/16/19 17:33*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/08/19 17:33*	*05/16/19 17:33*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*05/08/19 17:33*	*05/16/19 17:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B27-1
Date Collected: 05/07/19 11:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-15
Matrix: Solid
Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B27-1
Date Collected: 05/07/19 11:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-15
Matrix: Solid
Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	05/15/19 07:32	05/16/19 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*31 - 143*	*05/15/19 07:32*	*05/16/19 12:10*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*05/15/19 07:32*	*05/16/19 12:10*	*1*
2-Fluorophenol	*119*		*31 - 166*	*05/15/19 07:32*	*05/16/19 12:10*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*05/15/19 07:32*	*05/16/19 12:10*	*1*
Phenol-d5	*101*		*30 - 153*	*05/15/19 07:32*	*05/16/19 12:10*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/15/19 07:32*	*05/16/19 12:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.30**	**J**	1.2	0.24	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Arsenic	**4.1**		0.61	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Barium	**41**		0.61	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Beryllium	**0.67**		0.24	0.057	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Boron	**15**	**B**	3.0	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Cadmium	**0.23**	**B**	0.12	0.022	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Calcium	**34000**	**B**	12	2.1	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Chromium	**19**		0.61	0.30	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Cobalt	**7.8**		0.30	0.079	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Copper	**24**		0.61	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Iron	**16000**		12	6.3	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Lead	**13**		0.30	0.14	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Magnesium	**24000**		6.1	3.0	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Manganese	**260**		0.61	0.088	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Nickel	**26**		0.61	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Potassium	**3200**		30	11	mg/Kg	☼	05/14/19 16:16	05/16/19 16:46	1
Selenium	**0.37**	**J B**	0.61	0.36	mg/Kg	☼	05/14/19 16:16	05/16/19 16:46	1
Silver	**2.9**		0.30	0.078	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Sodium	**130**		61	9.0	mg/Kg	☼	05/14/19 16:16	05/16/19 16:46	1
Thallium	**1.1**		0.61	0.30	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Vanadium	**24**		0.30	0.072	mg/Kg	☼	05/14/19 16:16	05/15/19 16:14	1
Zinc	**60**		1.2	0.53	mg/Kg	☼	05/14/19 16:16	05/16/19 16:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:40	1
Manganese	**0.76**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:40	1

Client Sample ID: 2686V2-10-B27-1

Date Collected: 05/07/19 11:10
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-15

Matrix: Solid
Percent Solids: 80.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:43	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:43	1
Boron	**0.13**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:43	1
Calcium	**14**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:43	1
Chromium	**0.065**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:43	1
Cobalt	**0.014**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:43	1
Iron	**48**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:43	1
Lead	**0.033**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:43	1
Manganese	**0.17**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:43	1
Nickel	**0.050**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:43	1
Potassium	**18**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:43	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:43	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:43	1
Zinc	**0.14**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:43	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:29	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.020	0.0068	mg/Kg	☼	05/16/19 14:10	05/17/19 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	05/20/19 17:00	05/21/19 12:04	1
pH	**8.4**		0.2	0.2	SU			05/14/19 16:40	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B27-2
Date Collected: 05/07/19 11:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-16
Matrix: Solid
Percent Solids: 85.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Acetone	**0.014**		0.014	0.0063	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 134*	*05/08/19 17:33*	*05/16/19 17:59*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/08/19 17:33*	*05/16/19 17:59*	*1*
Dibromofluoromethane	*88*		*75 - 126*	*05/08/19 17:33*	*05/16/19 17:59*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/08/19 17:33*	*05/16/19 17:59*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1

Client Sample ID: 2686V2-10-B27-2
Date Collected: 05/07/19 11:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-16
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2-Methylnaphthalene	**0.021**	**J**	0.078	0.0071	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Acenaphthene	**0.012**	**J**	0.038	0.0069	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Benzo[a]pyrene	**0.027**	**J**	0.038	0.0075	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.038	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Chrysene	**0.021**	**J**	0.038	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1

Client Sample ID: 2686V2-10-B27-2
Date Collected: 05/07/19 11:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-16
Matrix: Solid
Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Phenanthrene	**0.044**		0.038	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Phenol	<0.19		0.19	0.086	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1
Pyrene	**0.0095**	**J**	0.038	0.0077	mg/Kg	☼	05/15/19 07:32	05/16/19 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*72*		*31 - 143*	*05/15/19 07:32*	*05/16/19 12:37*	*1*
2-Fluorobiphenyl	*93*		*43 - 145*	*05/15/19 07:32*	*05/16/19 12:37*	*1*
2-Fluorophenol	*113*		*31 - 166*	*05/15/19 07:32*	*05/16/19 12:37*	*1*
Nitrobenzene-d5	*93*		*37 - 147*	*05/15/19 07:32*	*05/16/19 12:37*	*1*
Phenol-d5	*104*		*30 - 153*	*05/15/19 07:32*	*05/16/19 12:37*	*1*
Terphenyl-d14	*98*		*42 - 157*	*05/15/19 07:32*	*05/16/19 12:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Arsenic	**5.7**		0.54	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Barium	**35**		0.54	0.062	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Beryllium	**0.57**		0.22	0.051	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Boron	**18**	**B**	2.7	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Cadmium	**0.45**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Calcium	**77000**	**B**	54	9.2	mg/Kg	☼	05/14/19 16:16	05/16/19 17:02	5
Chromium	**16**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Cobalt	**13**		0.27	0.071	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Copper	**23**		0.54	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Iron	**15000**		11	5.6	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Magnesium	**31000**		5.4	2.7	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Manganese	**400**		0.54	0.079	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Nickel	**30**		0.54	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Potassium	**3400**		27	9.6	mg/Kg	☼	05/14/19 16:16	05/16/19 16:58	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/14/19 16:16	05/16/19 16:58	1
Silver	**1.9**		0.27	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Sodium	**200**		54	8.0	mg/Kg	☼	05/14/19 16:16	05/16/19 16:58	1
Thallium	**0.64**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Vanadium	**20**		0.27	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 16:18	1
Zinc	**290**		1.1	0.48	mg/Kg	☼	05/14/19 16:16	05/16/19 16:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:44	1
Manganese	**2.0**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:44	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B27-2

Date Collected: 05/07/19 11:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-16

Matrix: Solid
Percent Solids: 85.5

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:47	1
Barium	**0.14**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:47	1
Boron	**0.12**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:47	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:47	1
Calcium	**28**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:47	1
Chromium	**0.046**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:47	1
Cobalt	**0.015**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:47	1
Iron	**24**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:47	1
Lead	**0.017**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:47	1
Manganese	**0.25**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:47	1
Nickel	**0.036**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:47	1
Potassium	**15**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:47	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:47	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:47	1
Zinc	**0.074**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:47	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:33	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.018	0.0061	mg/Kg	☼	05/16/19 14:10	05/17/19 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.52		0.52	0.18	mg/Kg	☼	05/21/19 10:25	05/21/19 14:57	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B29-1
Date Collected: 05/07/19 11:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-17
Matrix: Solid
Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*05/08/19 17:33*	*05/16/19 18:24*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/08/19 17:33*	*05/16/19 18:24*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/08/19 17:33*	*05/16/19 18:24*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*05/08/19 17:33*	*05/16/19 18:24*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1

Client Sample ID: 2686V2-10-B29-1
Date Collected: 05/07/19 11:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-17
Matrix: Solid
Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1

Client Sample ID: 2686V2-10-B29-1

Date Collected: 05/07/19 11:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-17

Matrix: Solid
Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	05/15/19 07:32	05/16/19 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*31 - 143*	*05/15/19 07:32*	*05/16/19 13:05*	*1*
2-Fluorobiphenyl	*81*		*43 - 145*	*05/15/19 07:32*	*05/16/19 13:05*	*1*
2-Fluorophenol	*108*		*31 - 166*	*05/15/19 07:32*	*05/16/19 13:05*	*1*
Nitrobenzene-d5	*88*		*37 - 147*	*05/15/19 07:32*	*05/16/19 13:05*	*1*
Phenol-d5	*94*		*30 - 153*	*05/15/19 07:32*	*05/16/19 13:05*	*1*
Terphenyl-d14	*88*		*42 - 157*	*05/15/19 07:32*	*05/16/19 13:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.24**	**J**	1.2	0.23	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Arsenic	**2.7**		0.59	0.20	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Barium	**40**		0.59	0.067	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Beryllium	**0.61**		0.24	0.055	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Boron	**17**	**B**	2.9	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Cadmium	**0.19**	**B**	0.12	0.021	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Calcium	**52000**	**B**	59	10	mg/Kg	☼	05/14/19 16:16	05/16/19 17:10	5
Chromium	**18**		0.59	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Cobalt	**7.3**		0.29	0.077	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Copper	**16**		0.59	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Iron	**14000**		12	6.1	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Lead	**8.5**		0.29	0.14	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Magnesium	**27000**		5.9	2.9	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Manganese	**270**		0.59	0.085	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Nickel	**25**		0.59	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Potassium	**3400**		29	10	mg/Kg	☼	05/14/19 16:16	05/16/19 17:06	1
Selenium	**0.59**	**B**	0.59	0.35	mg/Kg	☼	05/14/19 16:16	05/16/19 17:06	1
Silver	**2.9**		0.29	0.076	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Sodium	**110**		59	8.7	mg/Kg	☼	05/14/19 16:16	05/16/19 17:06	1
Thallium	**1.1**		0.59	0.29	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Vanadium	**21**		0.29	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 16:22	1
Zinc	**58**		1.2	0.52	mg/Kg	☼	05/14/19 16:16	05/16/19 17:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:48	1
Manganese	**0.75**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:48	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B29-1
Date Collected: 05/07/19 11:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-17
Matrix: Solid
Percent Solids: 82.1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:51	1
Barium	**0.16**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:51	1
Boron	**0.12**		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:51	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:51	1
Calcium	**14**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:51	1
Chromium	**0.067**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:51	1
Cobalt	**0.018**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:51	1
Iron	**43**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:51	1
Lead	**0.037**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:51	1
Manganese	**0.18**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:51	1
Nickel	**0.055**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:51	1
Potassium	**17**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:51	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:51	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:51	1
Zinc	**0.25**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:51	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:37	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0063	mg/Kg	☼	05/16/19 14:10	05/17/19 09:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.61		0.61	0.21	mg/Kg	☼	05/21/19 10:25	05/21/19 14:58	1
pH	**8.7**		0.2	0.2	SU			05/14/19 16:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B29-2
Date Collected: 05/07/19 11:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-18
Matrix: Solid
Percent Solids: 87.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Acetone	**0.0079**	**J**	0.014	0.0062	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Carbon disulfide	<0.0035		0.0035	0.00074	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	☼	05/08/19 17:33	05/16/19 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/16/19 18:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 131*	*05/08/19 17:33*	*05/16/19 18:49*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/08/19 17:33*	*05/16/19 18:49*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/16/19 18:49*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1

Client Sample ID: 2686V2-10-B29-2
Date Collected: 05/07/19 11:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-18
Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Benzo[a]pyrene	**0.026**	**J**	0.038	0.0073	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.038	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Chrysene	**0.024**	**J**	0.038	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1

Client Sample ID: 2686V2-10-B29-2
Date Collected: 05/07/19 11:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-18
Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Phenanthrene	**0.034**	**J**	0.038	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1
Pyrene	**0.014**	**J**	0.038	0.0075	mg/Kg	☼	05/15/19 07:32	05/16/19 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*31 - 143*	*05/15/19 07:32*	*05/16/19 13:32*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*05/15/19 07:32*	*05/16/19 13:32*	*1*
2-Fluorophenol	*117*		*31 - 166*	*05/15/19 07:32*	*05/16/19 13:32*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*05/15/19 07:32*	*05/16/19 13:32*	*1*
Phenol-d5	*108*		*30 - 153*	*05/15/19 07:32*	*05/16/19 13:32*	*1*
Terphenyl-d14	*97*		*42 - 157*	*05/15/19 07:32*	*05/16/19 13:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.30**	**J**	1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Arsenic	**5.9**		0.54	0.18	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Barium	**40**		0.54	0.061	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Beryllium	**0.62**		0.21	0.050	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Boron	**18**	**B**	2.7	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Calcium	**74000**	**B**	54	9.1	mg/Kg	☼	05/14/19 16:16	05/16/19 17:18	5
Chromium	**17**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Cobalt	**11**		0.27	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Copper	**23**		0.54	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Iron	**15000**		11	5.6	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Lead	**10**		0.27	0.12	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Magnesium	**29000**		5.4	2.7	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Manganese	**380**		0.54	0.078	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Nickel	**28**		0.54	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Potassium	**3700**		27	9.5	mg/Kg	☼	05/14/19 16:16	05/16/19 17:14	1
Selenium	**0.36**	**J B**	0.54	0.32	mg/Kg	☼	05/14/19 16:16	05/16/19 17:14	1
Silver	**4.3**		0.27	0.069	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Sodium	**190**		54	7.9	mg/Kg	☼	05/14/19 16:16	05/16/19 17:14	1
Thallium	**1.0**		0.54	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Vanadium	**22**		0.27	0.063	mg/Kg	☼	05/14/19 16:16	05/15/19 16:26	1
Zinc	**48**		1.1	0.47	mg/Kg	☼	05/14/19 16:16	05/16/19 17:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 14:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:52	1
Manganese	**1.6**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 14:52	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B29-2

Date Collected: 05/07/19 11:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-18

Matrix: Solid
Percent Solids: 87.4

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:55	1
Barium	**0.10**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:55	1
Boron	**0.095**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:55	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:55	1
Calcium	**20**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:55	1
Chromium	**0.040**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:55	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:55	1
Iron	**25**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:55	1
Lead	**0.016**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:55	1
Manganese	**0.16**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:55	1
Nickel	**0.030**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:55	1
Potassium	**13**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:55	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:55	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:55	1
Zinc	**0.062**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:55	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:41	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0059	mg/Kg	☼	05/16/19 14:10	05/17/19 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/21/19 10:25	05/21/19 14:58	1
pH	**8.6**		0.2	0.2	SU			05/14/19 16:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B32-1
Date Collected: 05/07/19 11:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-19
Matrix: Solid
Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/08/19 17:33	05/16/19 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/16/19 19:14*	*1*
4-Bromofluorobenzene (Surr)	*84*		*75 - 131*	*05/08/19 17:33*	*05/16/19 19:14*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/08/19 17:33*	*05/16/19 19:14*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/08/19 17:33*	*05/16/19 19:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1

Client Sample ID: 2686V2-10-B32-1
Date Collected: 05/07/19 11:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-19
Matrix: Solid
Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Benzo[a]pyrene	**0.025**	**J**	0.039	0.0077	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1

Client Sample ID: 2686V2-10-B32-1
Date Collected: 05/07/19 11:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-19
Matrix: Solid
Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.024	J	0.039	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1
Pyrene	0.0085	J	0.039	0.0079	mg/Kg	☼	05/15/19 07:32	05/16/19 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*31 - 143*	*05/15/19 07:32*	*05/16/19 13:59*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*05/15/19 07:32*	*05/16/19 13:59*	*1*
2-Fluorophenol	*113*		*31 - 166*	*05/15/19 07:32*	*05/16/19 13:59*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*05/15/19 07:32*	*05/16/19 13:59*	*1*
Phenol-d5	*98*		*30 - 153*	*05/15/19 07:32*	*05/16/19 13:59*	*1*
Terphenyl-d14	*94*		*42 - 157*	*05/15/19 07:32*	*05/16/19 13:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.22	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Arsenic	13		0.57	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Barium	37		0.57	0.065	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Beryllium	0.62		0.23	0.053	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Boron	14	B	2.8	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Cadmium	0.37	B	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Calcium	60000	B	57	9.7	mg/Kg	☼	05/14/19 16:16	05/16/19 17:26	5
Chromium	17		0.57	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Cobalt	15		0.28	0.075	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Copper	25		0.57	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Iron	24000		11	5.9	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Lead	13		0.28	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Magnesium	28000		5.7	2.8	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Manganese	380		0.57	0.083	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Nickel	34		0.57	0.17	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Potassium	2900		28	10	mg/Kg	☼	05/14/19 16:16	05/16/19 17:22	1
Selenium	1.1	B	0.57	0.33	mg/Kg	☼	05/14/19 16:16	05/16/19 17:22	1
Silver	2.5		0.28	0.073	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Sodium	120		57	8.4	mg/Kg	☼	05/14/19 16:16	05/16/19 17:22	1
Thallium	0.93		0.57	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Vanadium	24		0.28	0.067	mg/Kg	☼	05/14/19 16:16	05/15/19 16:30	1
Zinc	58		1.1	0.50	mg/Kg	☼	05/14/19 16:16	05/16/19 17:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 14:57	1
Iron	<0.20		0.20	0.20	mg/L		05/17/19 14:53	05/20/19 14:57	1

Client Sample ID: 2686V2-10-B32-1

Date Collected: 05/07/19 11:55
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-19

Matrix: Solid
Percent Solids: 83.7

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 15:59	1
Barium	<0.50		0.50	0.050	mg/L		05/17/19 14:52	05/20/19 15:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 15:59	1
Boron	<0.10		0.10	0.050	mg/L		05/17/19 14:52	05/20/19 15:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 15:59	1
Calcium	**9.3**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:59	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:59	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:59	1
Iron	**6.2**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 15:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 15:59	1
Manganese	**0.030**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:59	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:59	1
Potassium	**2.9**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 15:59	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 15:59	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 15:59	1
Zinc	**0.078**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 15:59	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:45	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.019	0.0063	mg/Kg	☼	05/16/19 14:10	05/17/19 09:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.57		0.57	0.20	mg/Kg	☼	05/21/19 10:25	05/21/19 14:59	1
pH	**8.6**		0.2	0.2	SU			05/14/19 16:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B32-2
Date Collected: 05/07/19 12:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-20
Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/08/19 17:33	05/16/19 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*05/08/19 17:33*	*05/16/19 19:39*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 131*	*05/08/19 17:33*	*05/16/19 19:39*	*1*
Dibromofluoromethane	*97*		*75 - 126*	*05/08/19 17:33*	*05/16/19 19:39*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*05/08/19 17:33*	*05/16/19 19:39*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1

Client Sample ID: 2686V2-10-B32-2
Date Collected: 05/07/19 12:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-20
Matrix: Solid
Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2-Methylnaphthalene	**0.0075**	**J**	0.075	0.0069	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.037	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Chrysene	**0.023**	**J**	0.037	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1

Client Sample ID: 2686V2-10-B32-2
Date Collected: 05/07/19 12:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-20
Matrix: Solid
Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Phenanthrene	**0.028**	**J**	0.037	0.0052	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1
Pyrene	**0.011**	**J**	0.037	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*31 - 143*	*05/15/19 07:32*	*05/16/19 14:26*	*1*
2-Fluorobiphenyl	*86*		*43 - 145*	*05/15/19 07:32*	*05/16/19 14:26*	*1*
2-Fluorophenol	*118*		*31 - 166*	*05/15/19 07:32*	*05/16/19 14:26*	*1*
Nitrobenzene-d5	*94*		*37 - 147*	*05/15/19 07:32*	*05/16/19 14:26*	*1*
Phenol-d5	*107*		*30 - 153*	*05/15/19 07:32*	*05/16/19 14:26*	*1*
Terphenyl-d14	*99*		*42 - 157*	*05/15/19 07:32*	*05/16/19 14:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.23**	**J**	1.1	0.21	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Arsenic	**4.0**		0.55	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Barium	**32**		0.55	0.062	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Beryllium	**0.56**		0.22	0.051	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Boron	**16**	**B**	2.7	0.25	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Cadmium	**0.21**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Calcium	**94000**	**B**	55	9.3	mg/Kg	☼	05/14/19 16:16	05/16/19 17:34	5
Chromium	**14**		0.55	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Cobalt	**10**		0.27	0.072	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Copper	**19**		0.55	0.15	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Iron	**14000**		11	5.7	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Lead	**11**		0.27	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Magnesium	**52000**		27	14	mg/Kg	☼	05/14/19 16:16	05/16/19 17:34	5
Manganese	**570**		0.55	0.079	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Nickel	**24**		0.55	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Potassium	**3000**		27	9.7	mg/Kg	☼	05/14/19 16:16	05/16/19 17:30	1
Selenium	**0.42**	**J B**	0.55	0.32	mg/Kg	☼	05/14/19 16:16	05/16/19 17:30	1
Silver	**1.6**		0.27	0.070	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Sodium	**190**		55	8.1	mg/Kg	☼	05/14/19 16:16	05/16/19 17:30	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Vanadium	**18**		0.27	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 16:34	1
Zinc	**41**		1.1	0.48	mg/Kg	☼	05/14/19 16:16	05/16/19 17:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 15:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 15:01	1
Manganese	**2.9**		0.025	0.010	mg/L		05/17/19 14:53	05/20/19 15:01	1

Client Sample ID: 2686V2-10-B32-2

Date Collected: 05/07/19 12:00
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-20

Matrix: Solid
Percent Solids: 86.8

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 16:11	1
Barium	**0.10**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 16:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 16:11	1
Boron	**0.085**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 16:11	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 16:11	1
Calcium	**19**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 16:11	1
Chromium	**0.026**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:11	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:11	1
Iron	**17**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 16:11	1
Lead	**0.013**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 16:11	1
Manganese	**0.17**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:11	1
Nickel	**0.020**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:11	1
Potassium	**9.8**	**F1**	2.5	0.50	mg/L		05/17/19 14:52	05/20/19 16:11	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 16:11	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:11	1
Zinc	**0.036**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 16:11	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/20/19 23:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/20/19 23:58	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0063	mg/Kg	☼	05/16/19 14:10	05/17/19 09:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	05/21/19 10:25	05/21/19 15:00	1
pH	**8.4**		0.2	0.2	SU			05/14/19 16:56	1

Client Sample ID: 2686V2-10-B35-1

Date Collected: 05/07/19 12:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-21

Matrix: Solid
Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00061	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Methylene Chloride	**0.0022**	**J**	0.0044	0.0017	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Styrene	**0.00079**	**J**	0.0018	0.00053	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Vinyl chloride	<0.0018		0.0018	0.00077	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/08/19 17:33	05/17/19 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/08/19 17:33*	*05/17/19 16:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/08/19 17:33*	*05/17/19 16:11*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/17/19 16:11*	*1*
Toluene-d8 (Surr)	*94*		*75 - 124*	*05/08/19 17:33*	*05/17/19 16:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1

Client Sample ID: 2686V2-10-B35-1
Date Collected: 05/07/19 12:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-21
Matrix: Solid
Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Benzo[a]pyrene	**0.026**	**J**	0.040	0.0078	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Chrysene	**0.011**	**J**	0.040	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Dibenz(a,h)anthracene	**0.025**	**J**	0.040	0.0078	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1

Client Sample ID: 2686V2-10-B35-1
Date Collected: 05/07/19 12:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-21
Matrix: Solid
Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1
Pyrene	**0.013**	**J**	0.040	0.0080	mg/Kg	☼	05/15/19 07:32	05/16/19 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*69*		*31 - 143*	*05/15/19 07:32*	*05/16/19 14:53*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*05/15/19 07:32*	*05/16/19 14:53*	*1*
2-Fluorophenol	*104*		*31 - 166*	*05/15/19 07:32*	*05/16/19 14:53*	*1*
Nitrobenzene-d5	*87*		*37 - 147*	*05/15/19 07:32*	*05/16/19 14:53*	*1*
Phenol-d5	*93*		*30 - 153*	*05/15/19 07:32*	*05/16/19 14:53*	*1*
Terphenyl-d14	*89*		*42 - 157*	*05/15/19 07:32*	*05/16/19 14:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.31**	**J**	1.1	0.22	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Arsenic	**4.6**		0.56	0.19	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Barium	**39**		0.56	0.064	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Beryllium	**0.65**		0.22	0.052	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Boron	**16**	**B**	2.8	0.26	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Cadmium	**0.28**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Calcium	**61000**	**B**	56	9.5	mg/Kg	☼	05/14/19 16:16	05/16/19 17:50	5
Chromium	**18**		0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Cobalt	**13**		0.28	0.073	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Copper	**24**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Iron	**17000**		11	5.8	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Lead	**14**		0.28	0.13	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Magnesium	**27000**		5.6	2.8	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Manganese	**370**		0.56	0.081	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Nickel	**31**		0.56	0.16	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Potassium	**3400**		28	9.9	mg/Kg	☼	05/14/19 16:16	05/16/19 17:46	1
Selenium	**0.73**	**B**	0.56	0.33	mg/Kg	☼	05/14/19 16:16	05/16/19 17:46	1
Silver	**2.6**		0.28	0.072	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Sodium	**140**		56	8.3	mg/Kg	☼	05/14/19 16:16	05/16/19 17:46	1
Thallium	**0.92**		0.56	0.28	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Vanadium	**24**		0.28	0.066	mg/Kg	☼	05/14/19 16:16	05/15/19 16:38	1
Zinc	**59**		1.1	0.49	mg/Kg	☼	05/14/19 16:16	05/16/19 17:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:53	05/20/19 15:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:53	05/20/19 15:13	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B35-1

Date Collected: 05/07/19 12:15
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-21

Matrix: Solid
Percent Solids: 81.9

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:52	05/20/19 16:27	1
Barium	**0.091**	**J**	0.50	0.050	mg/L		05/17/19 14:52	05/20/19 16:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:52	05/20/19 16:27	1
Boron	**0.079**	**J**	0.10	0.050	mg/L		05/17/19 14:52	05/20/19 16:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 14:52	05/20/19 16:27	1
Calcium	**12**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 16:27	1
Chromium	**0.028**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:27	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:27	1
Iron	**18**		0.40	0.20	mg/L		05/17/19 14:52	05/20/19 16:27	1
Lead	**0.016**		0.0075	0.0075	mg/L		05/17/19 14:52	05/20/19 16:27	1
Manganese	**0.088**		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:27	1
Nickel	**0.020**	**J**	0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:27	1
Potassium	**8.7**		2.5	0.50	mg/L		05/17/19 14:52	05/20/19 16:27	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 14:52	05/20/19 16:27	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 14:52	05/20/19 16:27	1
Zinc	**0.054**	**J ^**	0.50	0.020	mg/L		05/17/19 14:52	05/20/19 16:27	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 14:52	05/21/19 00:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:52	05/21/19 00:14	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 08:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.033**		0.020	0.0065	mg/Kg	☼	05/16/19 14:10	05/17/19 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/21/19 10:25	05/21/19 15:00	1
pH	**8.5**		0.2	0.2	SU			05/14/19 17:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B35-2
Date Collected: 05/07/19 12:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-22
Matrix: Solid
Percent Solids: 89.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00062	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Acetone	**0.0069**	**J**	0.015	0.0063	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Bromoform	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Chloroform	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Styrene	**0.00090**	**J**	0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/08/19 17:33*	*05/17/19 16:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/08/19 17:33*	*05/17/19 16:36*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/08/19 17:33*	*05/17/19 16:36*	*1*
Toluene-d8 (Surr)	*97*		*75 - 124*	*05/08/19 17:33*	*05/17/19 16:36*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1

Client Sample ID: 2686V2-10-B35-2
Date Collected: 05/07/19 12:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-22
Matrix: Solid
Percent Solids: 89.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2-Methylnaphthalene	**0.071**	**J**	0.073	0.0067	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Benzo[a]pyrene	**0.024**	**J**	0.036	0.0070	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Benzo[g,h,i]perylene	**0.018**	**J**	0.036	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Chrysene	**0.029**	**J**	0.036	0.0099	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Dibenz(a,h)anthracene	**0.023**	**J**	0.036	0.0070	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1

Client Sample ID: 2686V2-10-B35-2

Date Collected: 05/07/19 12:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-22

Matrix: Solid
Percent Solids: 89.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Naphthalene	**0.0081**	**J**	0.036	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Phenanthrene	**0.036**		0.036	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1
Pyrene	**0.011**	**J**	0.036	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*31 - 143*	*05/15/19 07:32*	*05/16/19 15:20*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*05/15/19 07:32*	*05/16/19 15:20*	*1*
2-Fluorophenol	*116*		*31 - 166*	*05/15/19 07:32*	*05/16/19 15:20*	*1*
Nitrobenzene-d5	*96*		*37 - 147*	*05/15/19 07:32*	*05/16/19 15:20*	*1*
Phenol-d5	*104*		*30 - 153*	*05/15/19 07:32*	*05/16/19 15:20*	*1*
Terphenyl-d14	*97*		*42 - 157*	*05/15/19 07:32*	*05/16/19 15:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.25**	**J**	1.1	0.21	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Arsenic	**7.0**		0.54	0.19	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Barium	**36**		0.54	0.062	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Beryllium	**0.58**		0.22	0.051	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Boron	**15**		2.7	0.25	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Cadmium	**0.22**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Calcium	**68000**	**B**	54	9.2	mg/Kg	☼	05/14/19 16:19	05/16/19 12:19	5
Chromium	**16**		0.54	0.27	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Cobalt	**12**		0.27	0.071	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Copper	**24**	**B**	0.54	0.15	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Iron	**16000**	**B**	11	5.6	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Lead	**12**		0.27	0.13	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Magnesium	**31000**		5.4	2.7	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Manganese	**420**	**B**	0.54	0.079	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Nickel	**33**		0.54	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Potassium	**3000**		27	9.6	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Silver	**1.8**		0.27	0.070	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Sodium	**190**		54	8.0	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Thallium	**0.67**		0.54	0.27	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Vanadium	**19**		0.27	0.064	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1
Zinc	**46**		1.1	0.48	mg/Kg	☼	05/14/19 16:19	05/15/19 13:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:55	05/20/19 10:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:55	05/20/19 10:59	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B35-2

Date Collected: 05/07/19 12:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-22

Matrix: Solid
Percent Solids: 89.5

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 08:45	05/17/19 15:47	1
Barium	**0.096**	**J**	0.50	0.050	mg/L		05/17/19 08:45	05/17/19 15:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 08:45	05/17/19 15:47	1
Boron	**0.095**	**J**	0.10	0.050	mg/L		05/17/19 08:45	05/17/19 15:47	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 08:45	05/17/19 15:47	1
Calcium	**21**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:47	1
Chromium	**0.021**	**J**	0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:47	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:47	1
Iron	**8.6**		0.40	0.20	mg/L		05/17/19 08:45	05/17/19 15:47	1
Lead	**0.011**		0.0075	0.0075	mg/L		05/17/19 08:45	05/17/19 15:47	1
Manganese	**0.10**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:47	1
Nickel	**0.010**	**J**	0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:47	1
Potassium	**8.3**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:47	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 08:45	05/17/19 15:47	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:47	1
Zinc	**0.022**	**J**	0.50	0.020	mg/L		05/17/19 08:45	05/17/19 15:47	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 08:45	05/17/19 16:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 08:45	05/17/19 16:21	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 07:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.017	0.0058	mg/Kg	☼	05/16/19 14:10	05/17/19 09:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.53		0.53	0.18	mg/Kg	☼	05/21/19 10:25	05/21/19 15:00	1
pH	**8.1**		0.2	0.2	SU			05/14/19 17:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B37-1
Date Collected: 05/07/19 12:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-25
Matrix: Solid
Percent Solids: 82.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Acetone	**0.012**	**J**	0.016	0.0070	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Styrene	**0.0012**	**J**	0.0016	0.00048	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/08/19 17:33*	*05/17/19 17:02*	*1*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/08/19 17:33*	*05/17/19 17:02*	*1*
Dibromofluoromethane	*95*		*75 - 126*	*05/08/19 17:33*	*05/17/19 17:02*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/08/19 17:33*	*05/17/19 17:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1

Client Sample ID: 2686V2-10-B37-1
Date Collected: 05/07/19 12:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-25
Matrix: Solid
Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Benzo[a]pyrene	**0.027**	**J**	0.040	0.0078	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Benzo[b]fluoranthene	**0.0095**	**J**	0.040	0.0087	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Benzo[g,h,i]perylene	**0.017**	**J**	0.040	0.013	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Chrysene	**0.019**	**J**	0.040	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1

Client Sample ID: 2686V2-10-B37-1
Date Collected: 05/07/19 12:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-25
Matrix: Solid
Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.027	J	0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1
Pyrene	0.020	J	0.040	0.0080	mg/Kg	☼	05/15/19 07:32	05/16/19 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*31 - 143*	*05/15/19 07:32*	*05/16/19 15:47*	*1*
2-Fluorobiphenyl	*89*		*43 - 145*	*05/15/19 07:32*	*05/16/19 15:47*	*1*
2-Fluorophenol	*115*		*31 - 166*	*05/15/19 07:32*	*05/16/19 15:47*	*1*
Nitrobenzene-d5	*93*		*37 - 147*	*05/15/19 07:32*	*05/16/19 15:47*	*1*
Phenol-d5	*105*		*30 - 153*	*05/15/19 07:32*	*05/16/19 15:47*	*1*
Terphenyl-d14	*98*		*42 - 157*	*05/15/19 07:32*	*05/16/19 15:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.2	0.23	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Arsenic	8.0		0.60	0.20	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Barium	34		0.60	0.068	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Beryllium	0.65		0.24	0.056	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Boron	15		3.0	0.28	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Cadmium	0.31	B	0.12	0.021	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Calcium	70000	B	60	10	mg/Kg	☼	05/14/19 16:19	05/16/19 12:23	5
Chromium	18		0.60	0.29	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Cobalt	14		0.30	0.078	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Copper	20	B	0.60	0.17	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Iron	19000	B	12	6.2	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Lead	13		0.30	0.14	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Magnesium	34000		6.0	3.0	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Manganese	430	B	0.60	0.086	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Nickel	34		0.60	0.17	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Potassium	3200		30	11	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Silver	2.5		0.30	0.077	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Sodium	230		60	8.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Thallium	0.77		0.60	0.30	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Vanadium	21		0.30	0.070	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1
Zinc	60		1.2	0.52	mg/Kg	☼	05/14/19 16:19	05/15/19 13:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:55	05/20/19 11:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:55	05/20/19 11:03	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:03	1
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:55	05/20/19 11:03	1

Client Sample ID: 2686V2-10-B37-1

Date Collected: 05/07/19 12:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-25

Matrix: Solid
Percent Solids: 82.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:55	05/20/19 11:03	1
Manganese	**1.6**		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:03	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:03	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.060**	**J**	0.25	0.050	mg/L		05/17/19 08:45	05/20/19 11:46	5
Barium	**0.38**	**J**	0.50	0.050	mg/L		05/17/19 08:45	05/17/19 15:51	1
Beryllium	**0.0056**		0.0040	0.0040	mg/L		05/17/19 08:45	05/17/19 15:51	1
Boron	**0.22**		0.10	0.050	mg/L		05/17/19 08:45	05/17/19 15:51	1
Cadmium	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/20/19 11:46	5
Calcium	**38**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:51	1
Chromium	**0.14**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:51	1
Cobalt	**0.072**	**J**	0.13	0.050	mg/L		05/17/19 08:45	05/20/19 11:46	5
Iron	**150**		0.40	0.20	mg/L		05/17/19 08:45	05/17/19 15:51	1
Lead	**0.099**		0.038	0.038	mg/L		05/17/19 08:45	05/20/19 11:46	5
Manganese	**0.67**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:51	1
Nickel	**0.19**		0.13	0.050	mg/L		05/17/19 08:45	05/20/19 11:46	5
Potassium	**37**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:51	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 08:45	05/17/19 15:51	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:51	1
Zinc	**0.37**	**J**	0.50	0.020	mg/L		05/17/19 08:45	05/17/19 15:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:55	05/21/19 12:04	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 08:45	05/17/19 16:25	1
Thallium	**0.0033**		0.0020	0.0020	mg/L		05/17/19 08:45	05/17/19 16:25	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 07:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**	**J**	0.020	0.0065	mg/Kg	☼	05/16/19 14:10	05/17/19 10:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.59		0.59	0.20	mg/Kg	☼	05/21/19 10:25	05/21/19 15:00	1
pH	**8.5**		0.2	0.2	SU			05/14/19 17:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B37-2
Date Collected: 05/07/19 12:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-26
Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,1-Dichloroethane	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Acetone	**0.0073**	**J**	0.014	0.0063	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00044	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Styrene	**0.00097**	**J**	0.0014	0.00044	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Toluene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/08/19 17:33*	*05/17/19 17:28*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/08/19 17:33*	*05/17/19 17:28*	*1*
Dibromofluoromethane	*89*		*75 - 126*	*05/08/19 17:33*	*05/17/19 17:28*	*1*
Toluene-d8 (Surr)	*93*		*75 - 124*	*05/08/19 17:33*	*05/17/19 17:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1

Client Sample ID: 2686V2-10-B37-2
Date Collected: 05/07/19 12:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-26
Matrix: Solid
Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2-Methylnaphthalene	**0.0071**	**J**	0.077	0.0070	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Benzo[a]pyrene	**0.026**	**J**	0.038	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Benzo[g,h,i]perylene	**0.020**	**J**	0.038	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Chrysene	**0.023**	**J**	0.038	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Dibenz(a,h)anthracene	**0.024**	**J**	0.038	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1

Client Sample ID: 2686V2-10-B37-2
Date Collected: 05/07/19 12:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-26
Matrix: Solid
Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.026**	**J**	0.038	0.0099	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Phenanthrene	**0.026**	**J**	0.038	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1
Pyrene	**0.0099**	**J**	0.038	0.0076	mg/Kg	☼	05/15/19 07:32	05/16/19 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*69*		*31 - 143*	*05/15/19 07:32*	*05/16/19 16:14*	*1*
2-Fluorobiphenyl	*88*		*43 - 145*	*05/15/19 07:32*	*05/16/19 16:14*	*1*
2-Fluorophenol	*113*		*31 - 166*	*05/15/19 07:32*	*05/16/19 16:14*	*1*
Nitrobenzene-d5	*88*		*37 - 147*	*05/15/19 07:32*	*05/16/19 16:14*	*1*
Phenol-d5	*103*		*30 - 153*	*05/15/19 07:32*	*05/16/19 16:14*	*1*
Terphenyl-d14	*97*		*42 - 157*	*05/15/19 07:32*	*05/16/19 16:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.27**	**J**	1.1	0.22	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Arsenic	**5.2**		0.56	0.19	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Barium	**36**		0.56	0.063	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Beryllium	**0.57**		0.22	0.052	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Boron	**16**		2.8	0.26	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Cadmium	**0.25**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Calcium	**84000**	**B**	56	9.4	mg/Kg	☼	05/14/19 16:19	05/16/19 12:27	5
Chromium	**16**		0.56	0.27	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Cobalt	**12**		0.28	0.073	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Copper	**18**	**B**	0.56	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Iron	**16000**	**B**	11	5.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Lead	**10**		0.28	0.13	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Magnesium	**47000**		28	14	mg/Kg	☼	05/14/19 16:19	05/16/19 12:27	5
Manganese	**610**	**B**	0.56	0.081	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Nickel	**28**		0.56	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Potassium	**3200**		28	9.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Silver	**1.7**		0.28	0.072	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Sodium	**200**		56	8.2	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Thallium	**0.66**		0.56	0.28	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Vanadium	**20**		0.28	0.066	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1
Zinc	**51**		1.1	0.49	mg/Kg	☼	05/14/19 16:19	05/15/19 13:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:55	05/20/19 11:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:55	05/20/19 11:20	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B37-2
Date Collected: 05/07/19 12:35
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-26
Matrix: Solid
Percent Solids: 86.8

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 08:45	05/17/19 15:54	1
Barium	**0.085**	**J**	0.50	0.050	mg/L		05/17/19 08:45	05/17/19 15:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 08:45	05/17/19 15:54	1
Boron	**0.074**	**J**	0.10	0.050	mg/L		05/17/19 08:45	05/17/19 15:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/17/19 08:45	05/17/19 15:54	1
Calcium	**20**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:54	1
Chromium	**0.014**	**J**	0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:54	1
Cobalt	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:54	1
Iron	**6.1**		0.40	0.20	mg/L		05/17/19 08:45	05/17/19 15:54	1
Lead	**0.0081**		0.0075	0.0075	mg/L		05/17/19 08:45	05/17/19 15:54	1
Manganese	**0.096**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:54	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:54	1
Potassium	**6.6**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:54	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 08:45	05/17/19 15:54	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:54	1
Zinc	**0.026**	**J**	0.50	0.020	mg/L		05/17/19 08:45	05/17/19 15:54	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 08:45	05/17/19 16:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 08:45	05/17/19 16:29	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/20/19 11:20	05/21/19 07:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0060	mg/Kg	☼	05/16/19 14:10	05/17/19 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.50		0.50	0.17	mg/Kg	☼	05/21/19 10:25	05/21/19 15:01	1
pH	**8.2**		0.2	0.2	SU			05/14/19 17:06	1

Client Sample ID: 2686V2-10-B06 **Lab Sample ID: 500-162990-27**
Date Collected: 05/07/19 13:20 **Matrix: Solid**
Date Received: 05/08/19 11:22 **Percent Solids: 81.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Styrene	**0.0012**	**J**	0.0018	0.00054	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/08/19 17:33	05/17/19 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*05/08/19 17:33*	*05/17/19 17:53*	*1*
4-Bromofluorobenzene (Surr)	*88*		*75 - 131*	*05/08/19 17:33*	*05/17/19 17:53*	*1*
Dibromofluoromethane	*91*		*75 - 126*	*05/08/19 17:33*	*05/17/19 17:53*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/08/19 17:33*	*05/17/19 17:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1

Client Sample ID: 2686V2-10-B06
Date Collected: 05/07/19 13:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-27
Matrix: Solid
Percent Solids: 81.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Acenaphthene	**0.016**	**J**	0.040	0.0072	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Acenaphthylene	**0.011**	**J**	0.040	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Anthracene	**0.079**		0.040	0.0067	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Benzo[a]anthracene	**0.36**		0.040	0.0054	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Benzo[a]pyrene	**0.36**		0.040	0.0077	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Benzo[b]fluoranthene	**0.53**		0.040	0.0086	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Benzo[g,h,i]perylene	**0.20**		0.040	0.013	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Benzo[k]fluoranthene	**0.21**		0.040	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Chrysene	**0.36**		0.040	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Dibenz(a,h)anthracene	**0.078**		0.040	0.0077	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Fluoranthene	**0.80**		0.040	0.0074	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Fluorene	**0.025**	**J**	0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1

Client Sample ID: 2686V2-10-B06
Date Collected: 05/07/19 13:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-27
Matrix: Solid
Percent Solids: 81.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.18**		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Phenanthrene	**0.37**		0.040	0.0056	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1
Pyrene	**0.52**		0.040	0.0080	mg/Kg	☼	05/15/19 07:32	05/16/19 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*57*		*31 - 143*	*05/15/19 07:32*	*05/16/19 16:41*	*1*
2-Fluorobiphenyl	*80*		*43 - 145*	*05/15/19 07:32*	*05/16/19 16:41*	*1*
2-Fluorophenol	*101*		*31 - 166*	*05/15/19 07:32*	*05/16/19 16:41*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*05/15/19 07:32*	*05/16/19 16:41*	*1*
Phenol-d5	*82*		*30 - 153*	*05/15/19 07:32*	*05/16/19 16:41*	*1*
Terphenyl-d14	*90*		*42 - 157*	*05/15/19 07:32*	*05/16/19 16:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Arsenic	**11**		0.56	0.19	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Barium	**52**		0.56	0.064	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Beryllium	**0.65**		0.22	0.052	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Boron	**12**		2.8	0.26	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Cadmium	**0.49**	**B**	0.11	0.020	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Calcium	**32000**	**B**	11	1.9	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Chromium	**17**		0.56	0.28	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Cobalt	**14**		0.28	0.073	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Copper	**32**	**B**	0.56	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Iron	**24000**	**B**	11	5.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Lead	**52**		0.28	0.13	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Magnesium	**22000**		5.6	2.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Manganese	**590**	**B**	0.56	0.081	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Nickel	**34**		0.56	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Potassium	**2500**		28	9.9	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Silver	**2.4**		0.28	0.072	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Sodium	**410**		56	8.3	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Thallium	**0.84**		0.56	0.28	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Vanadium	**23**		0.28	0.066	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1
Zinc	**130**		1.1	0.49	mg/Kg	☼	05/14/19 16:19	05/15/19 13:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:55	05/20/19 11:24	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:24	1
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:55	05/20/19 11:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:55	05/20/19 11:24	1

Client Sample ID: 2686V2-10-B06
Date Collected: 05/07/19 13:20
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-27
Matrix: Solid
Percent Solids: 81.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.72**		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:24	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:24	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.050**	**J**	0.25	0.050	mg/L		05/17/19 08:45	05/20/19 11:50	5
Barium	**0.47**	**J**	0.50	0.050	mg/L		05/17/19 08:45	05/17/19 15:58	1
Beryllium	**0.0067**		0.0040	0.0040	mg/L		05/17/19 08:45	05/17/19 15:58	1
Boron	**0.22**		0.10	0.050	mg/L		05/17/19 08:45	05/17/19 15:58	1
Cadmium	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/20/19 11:50	5
Calcium	**25**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:58	1
Chromium	**0.16**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:58	1
Cobalt	<0.13		0.13	0.050	mg/L		05/17/19 08:45	05/20/19 11:50	5
Iron	**160**		0.40	0.20	mg/L		05/17/19 08:45	05/17/19 15:58	1
Lead	**0.14**		0.038	0.038	mg/L		05/17/19 08:45	05/20/19 11:50	5
Manganese	**0.74**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:58	1
Nickel	**0.17**		0.13	0.050	mg/L		05/17/19 08:45	05/20/19 11:50	5
Potassium	**34**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 15:58	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 08:45	05/17/19 15:58	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 15:58	1
Zinc	**0.67**		0.50	0.020	mg/L		05/17/19 08:45	05/17/19 15:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:55	05/21/19 12:08	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 08:45	05/17/19 16:34	1
Thallium	**0.0039**		0.0020	0.0020	mg/L		05/17/19 08:45	05/17/19 16:34	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00035**		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.044**		0.019	0.0063	mg/Kg	☼	05/16/19 14:10	05/17/19 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.56		0.56	0.19	mg/Kg	☼	05/21/19 10:25	05/21/19 15:01	1
pH	**8.8**		0.2	0.2	SU			05/14/19 17:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B05
Date Collected: 05/07/19 13:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-28
Matrix: Solid
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Acetone	**0.0070**	**J**	0.015	0.0065	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Styrene	**0.0010**	**J**	0.0015	0.00045	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1
Xylenes, Total	<0.0030		0.0030	0.00047	mg/Kg	☼	05/08/19 17:33	05/17/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/08/19 17:33*	*05/17/19 18:19*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/08/19 17:33*	*05/17/19 18:19*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*05/08/19 17:33*	*05/17/19 18:19*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*	*05/08/19 17:33*	*05/17/19 18:19*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1

Client Sample ID: 2686V2-10-B05
Date Collected: 05/07/19 13:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-28
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Benzo[a]pyrene	**0.026**	**J**	0.037	0.0073	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Fluoranthene	**0.0085**	**J**	0.037	0.0070	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Client Sample ID: 2686V2-10-B05
Date Collected: 05/07/19 13:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-28
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.028	J	0.037	0.0098	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Phenanthrene	<0.037		0.037	0.0053	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	05/15/19 07:32	05/16/19 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*31 - 143*	*05/15/19 07:32*	*05/16/19 17:08*	*1*
2-Fluorobiphenyl	*82*		*43 - 145*	*05/15/19 07:32*	*05/16/19 17:08*	*1*
2-Fluorophenol	*104*		*31 - 166*	*05/15/19 07:32*	*05/16/19 17:08*	*1*
Nitrobenzene-d5	*86*		*37 - 147*	*05/15/19 07:32*	*05/16/19 17:08*	*1*
Phenol-d5	*88*		*30 - 153*	*05/15/19 07:32*	*05/16/19 17:08*	*1*
Terphenyl-d14	*95*		*42 - 157*	*05/15/19 07:32*	*05/16/19 17:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.22	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Arsenic	6.6		0.56	0.19	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Barium	37		0.56	0.064	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Beryllium	0.59		0.22	0.052	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Boron	14		2.8	0.26	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Cadmium	0.27	B	0.11	0.020	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Calcium	71000	B	56	9.5	mg/Kg	☼	05/14/19 16:19	05/16/19 12:31	5
Chromium	16		0.56	0.28	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Cobalt	11		0.28	0.073	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Copper	21	B	0.56	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Iron	16000	B	11	5.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Lead	12		0.28	0.13	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Magnesium	29000		5.6	2.8	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Manganese	400	B	0.56	0.081	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Nickel	28		0.56	0.16	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Potassium	2700		28	9.9	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Silver	2.2		0.28	0.072	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Sodium	300		56	8.3	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Thallium	0.75		0.56	0.28	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Vanadium	21		0.28	0.066	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1
Zinc	51		1.1	0.49	mg/Kg	☼	05/14/19 16:19	05/15/19 13:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/17/19 14:55	05/20/19 11:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/17/19 14:55	05/20/19 11:28	1
Chromium	<0.025		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:28	1
Iron	<0.40		0.40	0.20	mg/L		05/17/19 14:55	05/20/19 11:28	1

Client Sample ID: 2686V2-10-B05

Date Collected: 05/07/19 13:30
Date Received: 05/08/19 11:22

Lab Sample ID: 500-162990-28

Matrix: Solid
Percent Solids: 86.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/17/19 14:55	05/20/19 11:28	1
Manganese	**0.17**		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:28	1
Nickel	<0.025		0.025	0.010	mg/L		05/17/19 14:55	05/20/19 11:28	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.059**	**J**	0.25	0.050	mg/L		05/17/19 08:45	05/20/19 11:54	5
Barium	**0.53**		0.50	0.050	mg/L		05/17/19 08:45	05/17/19 16:02	1
Beryllium	**0.0072**		0.0040	0.0040	mg/L		05/17/19 08:45	05/17/19 16:02	1
Boron	**0.25**		0.10	0.050	mg/L		05/17/19 08:45	05/17/19 16:02	1
Cadmium	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/20/19 11:54	5
Calcium	**45**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 16:02	1
Chromium	**0.18**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 16:02	1
Cobalt	<0.13		0.13	0.050	mg/L		05/17/19 08:45	05/20/19 11:54	5
Iron	**160**		0.40	0.20	mg/L		05/17/19 08:45	05/17/19 16:02	1
Lead	**0.078**		0.038	0.038	mg/L		05/17/19 08:45	05/20/19 11:54	5
Manganese	**0.57**		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 16:02	1
Nickel	**0.19**		0.13	0.050	mg/L		05/17/19 08:45	05/20/19 11:54	5
Potassium	**43**		2.5	0.50	mg/L		05/17/19 08:45	05/17/19 16:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/17/19 08:45	05/17/19 16:02	1
Silver	<0.025		0.025	0.010	mg/L		05/17/19 08:45	05/17/19 16:02	1
Zinc	**0.40**	**J**	0.50	0.020	mg/L		05/17/19 08:45	05/17/19 16:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/17/19 14:55	05/21/19 12:12	1

Method: 6020A - Metals (ICP/MS) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/17/19 08:45	05/17/19 16:38	1
Thallium	**0.0041**		0.0020	0.0020	mg/L		05/17/19 08:45	05/17/19 16:38	1

Method: 7470A - Mercury (CVAA) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		05/20/19 11:20	05/21/19 08:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.018	0.0060	mg/Kg	☼	05/16/19 14:10	05/17/19 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.46		0.46	0.16	mg/Kg	☼	05/21/19 10:25	05/21/19 15:01	1
pH	**8.8**		0.2	0.2	SU			05/14/19 17:06	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-18A

Job ID: 500-162990-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	05-30-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B		Water	1,3-Dichloropropene, Total
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	Project Name: ~~FAP 316, Lake County~~	COC No.: 1 of 3
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 500-162990 COC Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project No.: PTB 184-006/018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** WILL OLEWICZ	Lab Job No.: 500-162990 Sample Temp: 3.7, 5.0, 3.5, 3.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	2686V2-10-1336	5-7-19	0920	S	X	X					X	X	X	X	X					
2	2686V2-10-1334-1		0935																	
3	2686V2-10-1334-2		0940																	
4	2686V2-10-1333-1		0950																	
5	2686V2-10-1333-2		0955																	
6	2686V2-10-1333-2 DUP		1000																	
7	2686V2-10-1330-1		1010																	
8	2686V2-10-1330-2		1015																	
9	2686V2-10-1331-1		1025																	
10	2686V2-10-1331-2		1030																	
11	2686V2-10-1328-1		1040																	
12	Trip Blank #1			S	X															

Relinquished by:	Date/Time 5/8/19 1030	Received by: P. Neal	Date/Time 5/8/19 1030
Relinquished by: P. Neal	Date/Time 5/8/19 1122	Received by: Rhen Scott	Date/Time 5/8/19 1122
Relinquished by:	Date/Time	Received by:	Date/Time

CHAIN OF CUSTODY RECORD

AB7-018A

Client Contact	Laboratory
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com

Project Name: ~~FAP 340, Lake County~~ ✓

Project No.: PTB 184-006 / ~~AB7~~-018A

TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other

Sampler: Will Olewicz

COC No.: 2 of 3

Lab Job No.: 500-162990

Sample Temp: 3.7, 5.0, 3.5, 3.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
13	2686V2-10-B28-2	5-7-19	1045	S	X	X					X	X	X	X	X					
14	2686V2-10-B28-2 Dup		1050																	
15	2686V2-10-B27-1		1110																	
16	2686V2-10-B27-2		1115																	
17	2686V2-10-B29-1		1130																	
18	2686V2-10-B29-2		1135																	
19	2686V2-10-B32-1		1155																	
20	2686V2-10-B32-2		1200																	
21	2686V2-10-B35-1		1215																	
22	2686V2-10-B35-2		1220		✓	✓					✓	✓	✓	✓	✓					
23	2686V2-10-G27	✓	1610	W	X	X					X	X	X	X	X					VOCs, SVOCs, metals, cyanide, pH
24	Trip Blank #6			W	X															

Relinquished by:	Date/Time 5/8/19 1030	Received by: P. Neal	Date/Time 5/8/19 1030
Relinquished by: P. Neal	Date/Time 5/8/19 1122	Received by: Shawn Scott	Date/Time 5/8/19 1122
Relinquished by:	Date/Time	Received by:	Date/Time

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

AE7-018A

Client Contact	Laboratory	Project Name: ~~FAP 340, Lake County~~ ✓	COC No.: 3 of 3
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	Lab: **Test America - Chicago** Address: **2417 Bond Street** **University Park, IL 60484** Phone: **708-534-5200** Contact: **Dick Wright** email: richard.wright@testamericainc.com	Project No.: PTB 184-006 / [redacted] 018A TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** WILL OLEWICZ	Lab Job No.: 500-162990 Sample Temp: 3.7, 5.0, 3.5, 3.1

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits.

* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.

** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.

*** If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide.

Matrix Key:
W: Water
S: Soil
SL: Sludge
S: Sediment
L: Leachate
DW: Drinking Water
OL: Oil
O: Other

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			Comments
25	2686V2-10-1337-1	5-7-19	1230	S	X	X					X	X	X	X	X				
26	2686V2-10-1337-2	↓	1235	↓	↓	↓					↓	↓	↓	↓	↓				
27	2686V2-10-1306		1320																
28	2686V2-10-1305		1330																
29	2686V2-10-1304		1340																
	~~2686V2-10-13~~																		
	~~2686V2-10-13~~																		
	~~2686V2-10-13~~																		
	~~2686V2-10-13~~																		
	~~2686V2-10-13~~																		
	~~2686V2-10-13~~			↓	↓	↓					↓	↓	↓	↓	↓				

Relinquished by:	Date/Time 5/8/19 1030	Received by: P. Neal	Date/Time 5/8/19 1030
Relinquished by: P. Neal	Date/Time 5/8/19 1122	Received by: [redacted]	Date/Time 5/8/19 1122
Relinquished by:	Date/Time	Received by:	Date/Time

5/22/2019

Andrews Engineering, Inc.

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